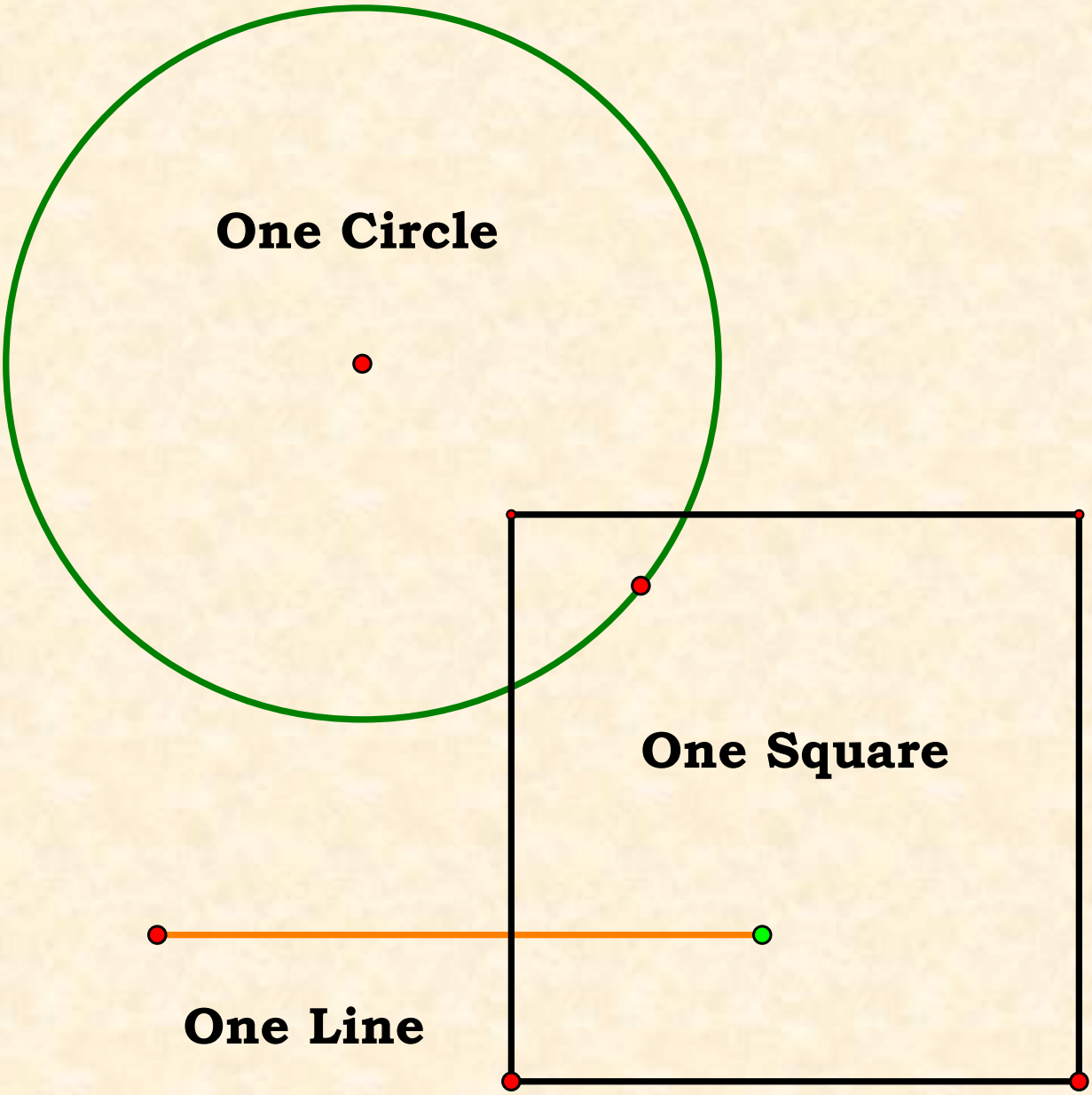
The Book of John



By John Clark

The Book of John

Elementary Grammar

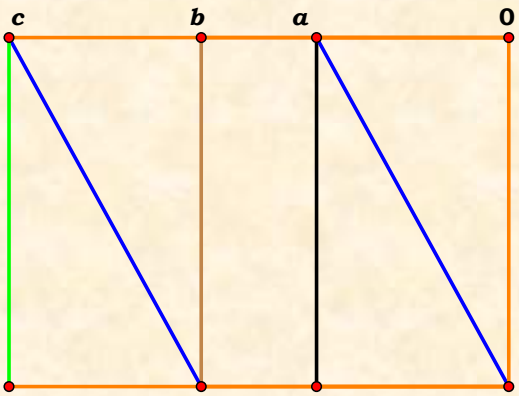
Friday, June 27, 2025

It was written, a long time ago, that mankind would be illiterate until after a certain time in human history. The so-called Delian Problem is another metaphor for that claim. This is why, I set out to write a grammar book. If one cannot think in accordance with the truth of things, then one has lived a wasted and detrimental life.

Addition

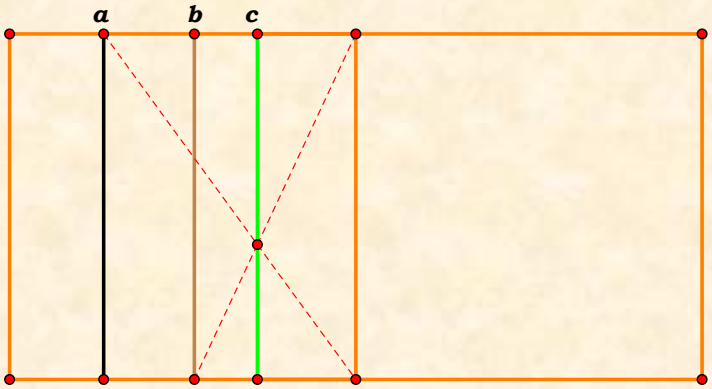
Addition

$(a + b) - c = 0.00000$



Addition

$\frac{1}{a} + \frac{1}{b} - \frac{1}{c} = 0.00000$



Addition by Induction

Written in common Grammar it would be

As a is to 0, so too is c to b.

or again in logical notation,

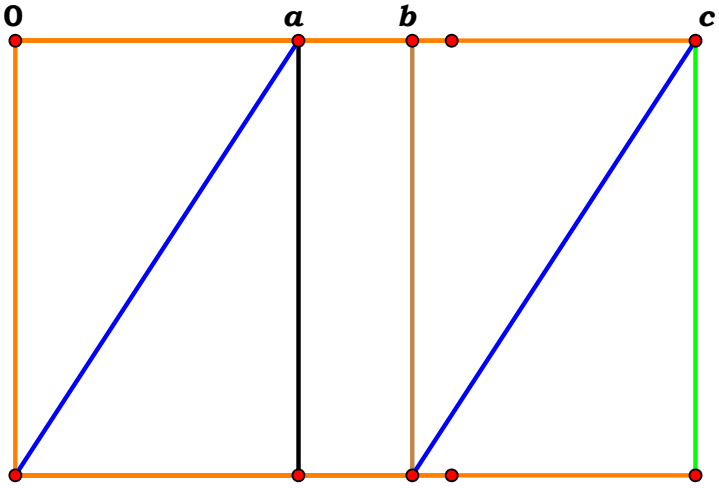
a : 0 :: b : c.

From this arithmetic reasoning, we acquire the notion of equality; equal processes rendered upon equal things, produce equal results, from whence those who like the sound of their own voice, produce as a number of axioms trying to cover every possible processes upon a thing, which is not actually required by anyone of sense. It would be called a self-evident truth which we learn. There are those who, not being able to keep track of all the actually differences in play, like Einstein, end up claiming that the Law of Idenity is not true, because he or his chef heated up his dinner for him and he forgot to account for it.

Therefore, senility makes it a fact that grammar differs from itself. Really! There are two kinds of equality, each commensurate with an element of a thing, i.e., equality is binary. Their historical names are Arithmetic Equality and Geometric Equality. Too often, this fact is forgotten, and thus, we have people trying to enumerate the geometric, when that is not how to present it. Such stupidity gets people claiming that every statement is some kind of hair-brained theory, being too stupid to realize the self-referential fallacy, that grammar is a theory of itself.

Unit **= 1.00000**
a **= 0.64894**
b **= 0.90989**
c **= 1.55883**
(*a* + *b*) − *c* = 0.00000

Addition



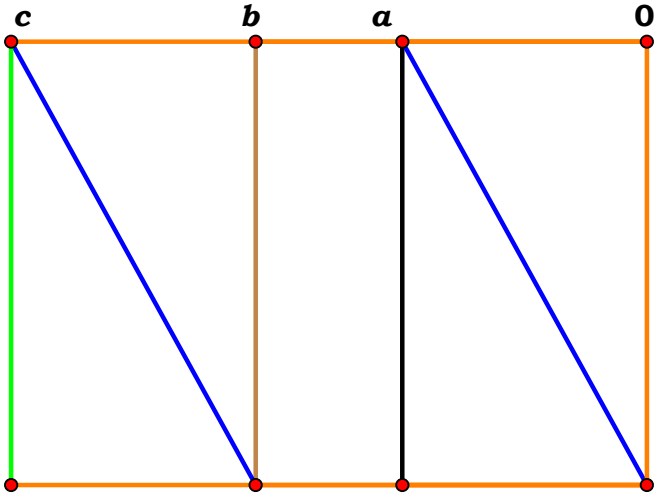
$a := .64894 \quad b := .90989$

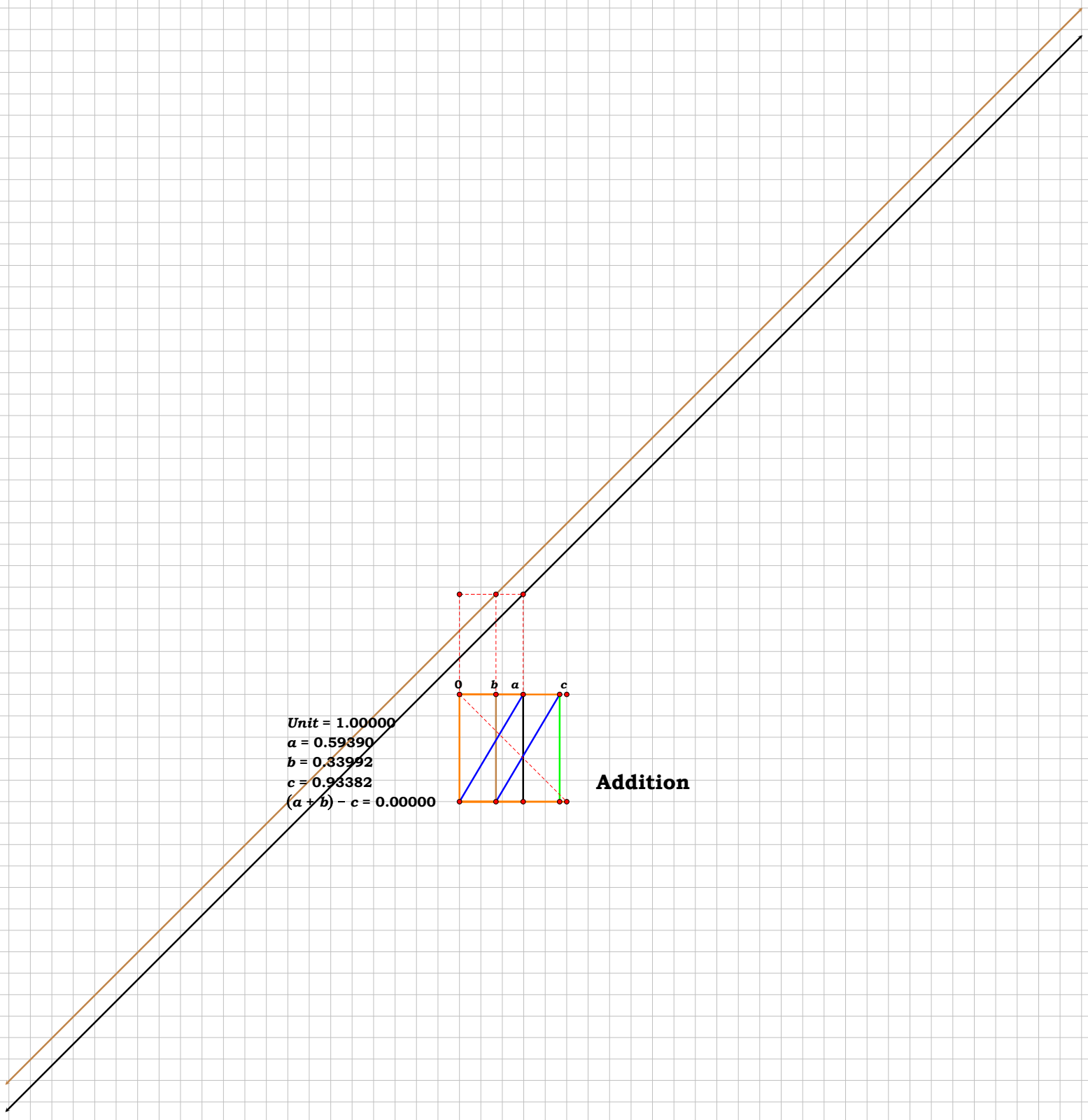
$a := \frac{0 + a}{1} \quad b := \frac{0 + b}{1} \quad c := a + b$

$c = 1.55883$

Unit **= 1.00000**
a **= –0.54937**
b **= –0.87899**
c **= –1.42836**
(*a* + *b*) − *c* = 0.00000

Addition





Unit = 1.00000
a = 0.59390
b = 0.33992
c = 0.93382
(***a*** + ***b***) − ***c*** = 0.00000

Addition

Deductive Addition

$a := .70693 \qquad b := .51907$

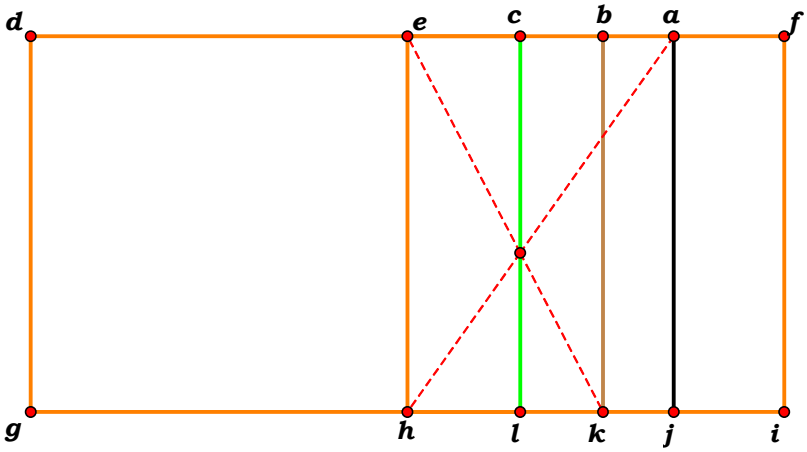
$c := \frac{a \cdot b}{a + b} \qquad c = 0.2993$

Deductive Addition takes place betweeen 0 and 1. In order to perform it, one must treat the values in inverse notation, i.e., using the reciprocal, or as is commonly said, the fraction. It may be that some make the mistake of claiming that the Laws of Nature change when dealing with the small, or the unit.

Addition

$Unit = 1.00000$
$a = 0.70693$
$b = 0.51907$
$c = 0.29930$
$\frac{1}{a} + \frac{1}{b} - \frac{1}{c} = 0.00000$

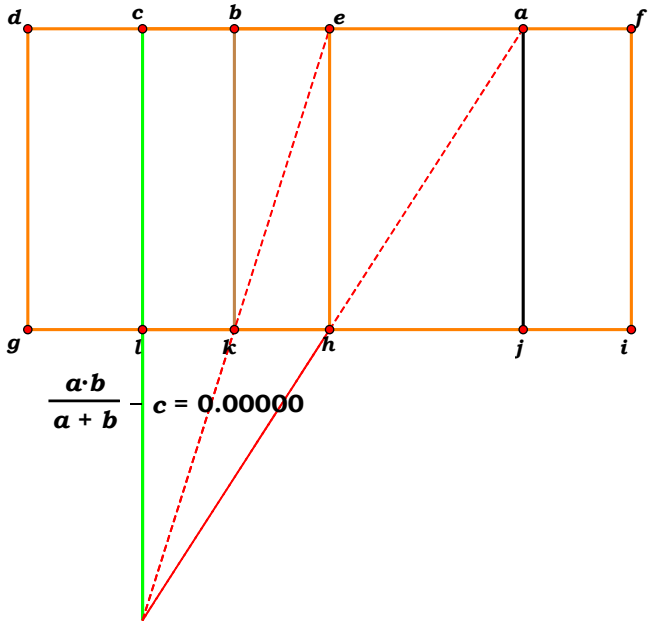
$\frac{1}{a} = 1.41456$
$\frac{1}{b} = 1.92651$
$\frac{1}{c} = 3.34108$



Addition

$Unit = 1.00000$
$a = 0.64169$
$b = -0.31528$
$c = -0.61980$
$\frac{1}{a} + \frac{1}{b} - \frac{1}{c} = 0.00000$

$\frac{1}{a} = 1.55838$
$\frac{1}{b} = -3.17180$
$\frac{1}{c} = -1.61342$

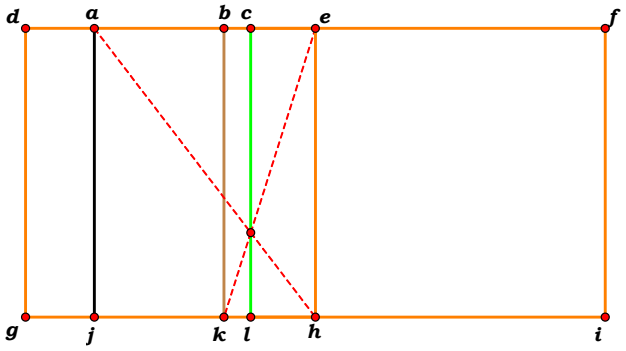


$\frac{a \cdot b}{a + b} - c = 0.00000$

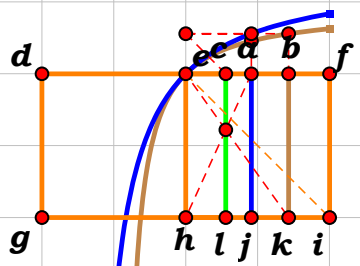
Addition

$Unit = 1.00000$
$a = -0.76263$
$b = -0.31528$
$c = -0.22306$
$\frac{1}{a} + \frac{1}{b} - \frac{1}{c} = 0.00000$

$\frac{1}{a} = -1.31126$
$\frac{1}{b} = -3.17180$
$\frac{1}{c} = -4.48305$



$\frac{a \cdot b}{a + b} - c = 0.00000$



$Unit = 1.00000$

$a = 0.45629$

$b = 0.71526$

$c = 0.27858$

$\frac{1}{a} + \frac{1}{b} - \frac{1}{c} = 0.00000$

$\frac{a \cdot b}{a + b} - c = 0.00000$

Addition

$\frac{1}{a} = 2.19159$

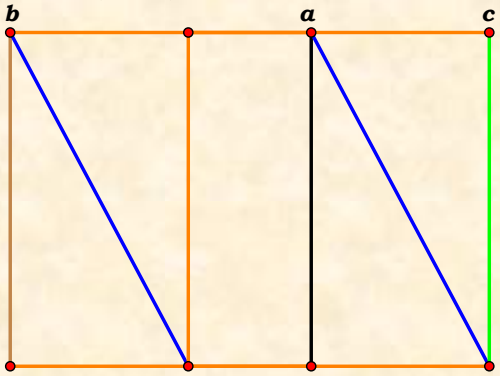
$\frac{1}{b} = 1.39809$

$\frac{1}{c} = 3.58968$

Subtraction

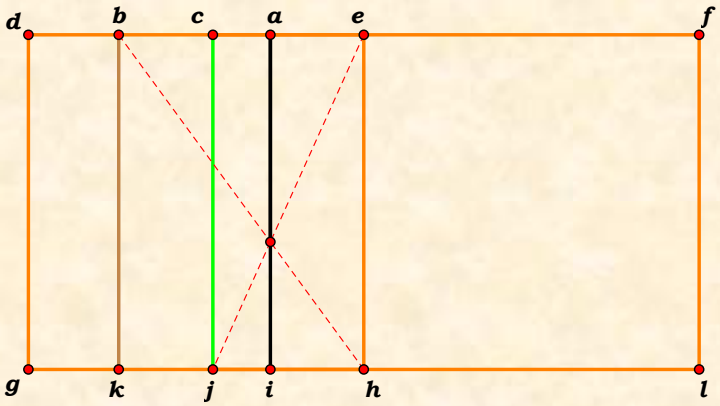
Subtraction

$(a - b) - c = 0.00000$



Subtraction

$\frac{1}{a} - \frac{1}{b} - \frac{1}{c} = 0.00000$



Subtraction by Induction

a := .42233 **b** := 1.01290

c := **a** – **b** **c** = –0.59057

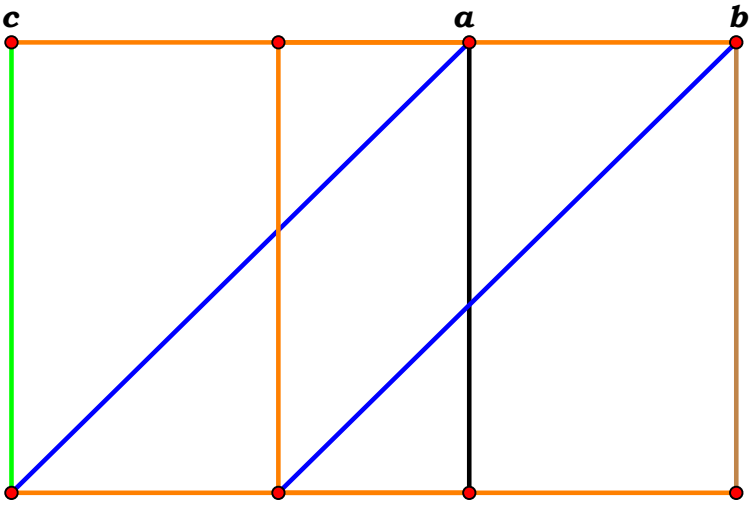
How many people, claiming that there are self-evident truths, bought into the fallacy of non-Euclidean Geometry? Everything we know is derived from perception. If one denies any part of it, they deny the whole of it and reasoning, is not only impossible, it is impossible to every have evolved, there would be no such thing as reality, or the Universe, itself.

Therefore, I treat all theory mongers the same, they are simply mentally handicapped. Think of the parallel lines in the intelligible, the parallel between perception and learnt behavior.

Only the stupid use the word equality as if there is only one kind, arithmetic, and perceptible, when in fact, to deny the one, you must deny the other.

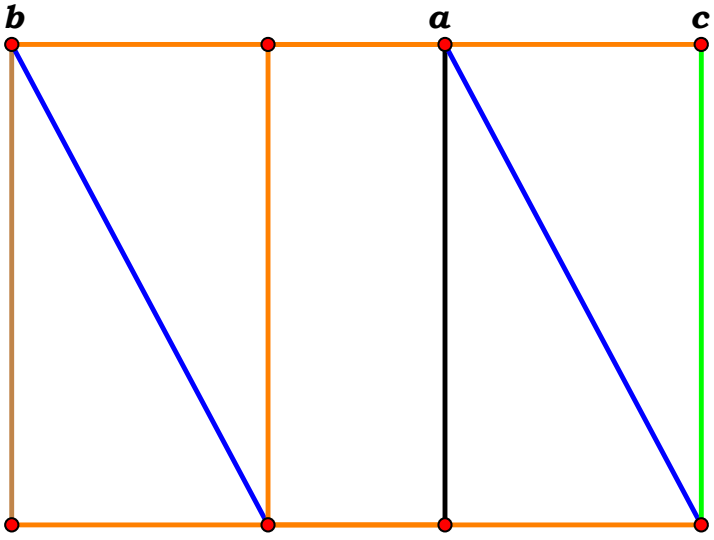
Unit = 1.00000
a = 0.42233
b = 1.01290
c = –0.59057
$(a - b) - c = 0.00000$

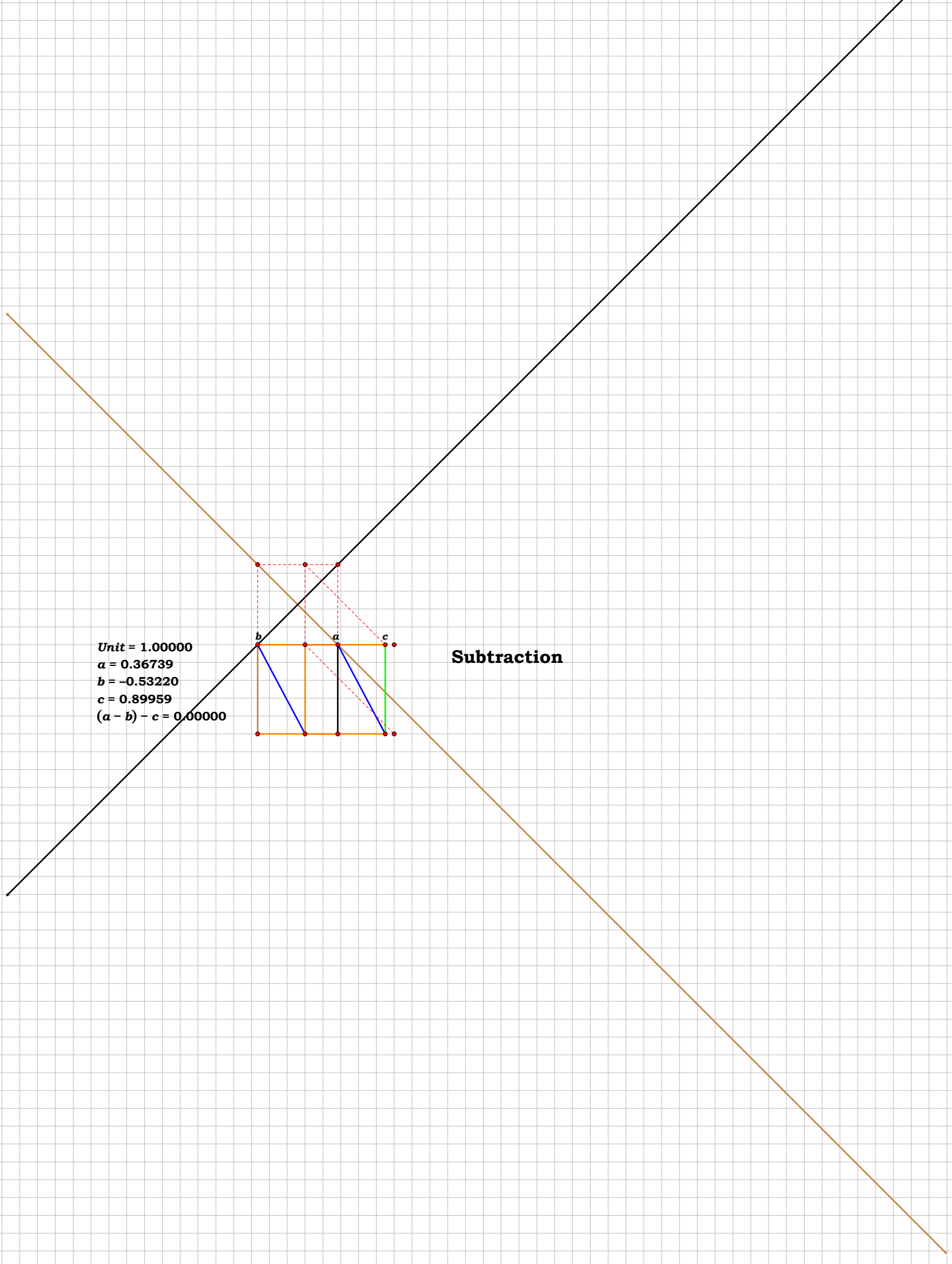
Subtraction



Unit = 1.00000
a = 0.36739
b = –0.53220
c = 0.89959
$(a - b) - c = 0.00000$

Subtraction





Unit = 1.00000
a = 0.36739
b = –0.53220
c = 0.89959
(*a* – *b*) – *c* = 0.00000

Subtraction

Subtraction Deductive

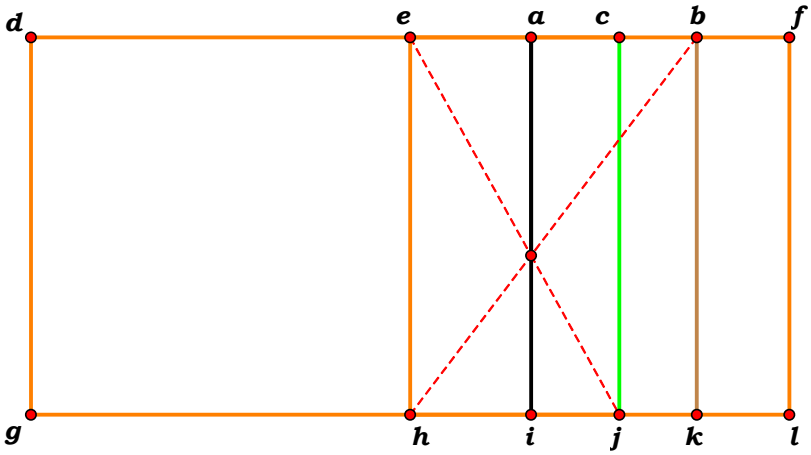
$a := .31894 \quad b := .75599$

$c := \frac{a \cdot b}{b - a} \quad c = 0.55169$

Subtraction

Unit = 1.00000
a = 0.31894
b = 0.75599
c = 0.55169

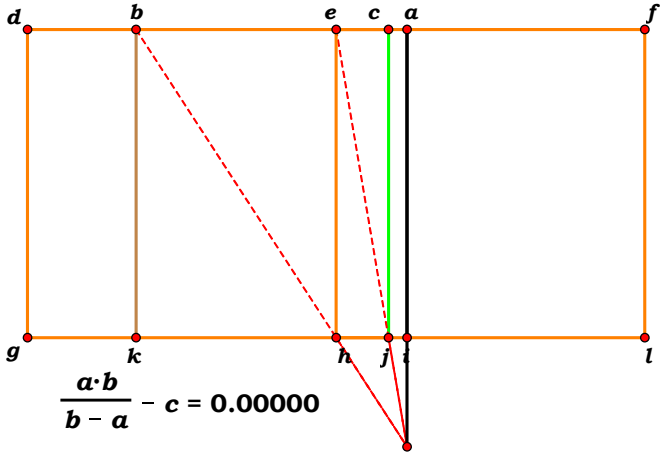
$\left(\frac{1}{a} - \frac{1}{b}\right) - \frac{1}{c} = 0.00000$



Subtraction

Unit = 1.00000
a = 0.22967
b = –0.64833
c = 0.16959

$\left(\frac{1}{a} - \frac{1}{b}\right) - \frac{1}{c} = 0.00000$

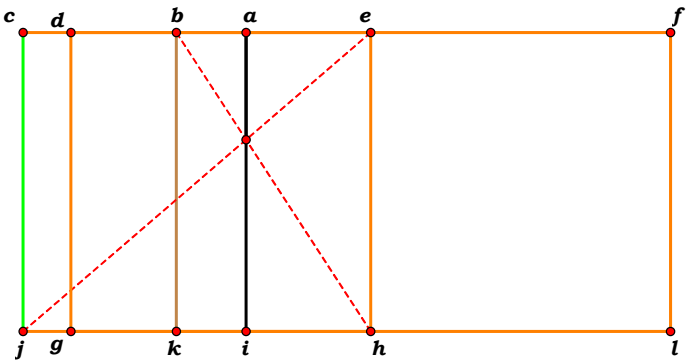


$\frac{a \cdot b}{b - a} - c = 0.00000$

Subtraction

Unit = 1.00000
a = –0.41584
b = –0.64833
c = –1.15960

$\left(\frac{1}{a} - \frac{1}{b}\right) - \frac{1}{c} = 0.00000$



$\frac{a \cdot b}{b - a} - c = 0.00000$

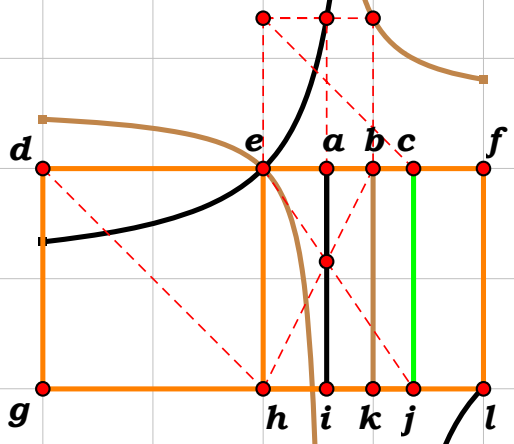
$Unit = 1.00000$

$a = 0.28804$

$b = 0.49847$

$c = 0.68230$

$$\left(\frac{1}{a} - \frac{1}{b}\right) - \frac{1}{c} = 0.00000$$



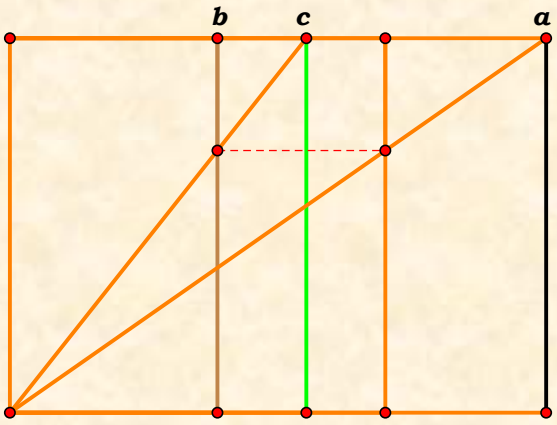
Subtraction

$$\frac{a \cdot b}{b - a} - c = 0.00000$$

Multiplication

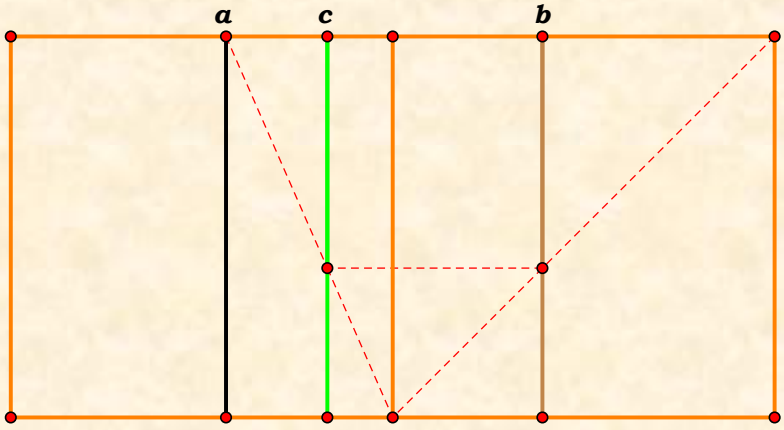
Multiplication

$a \cdot b - c = 0.00000$



Multiplication

$a \cdot b - c = 0.00000$



Mulltiplication by Induction

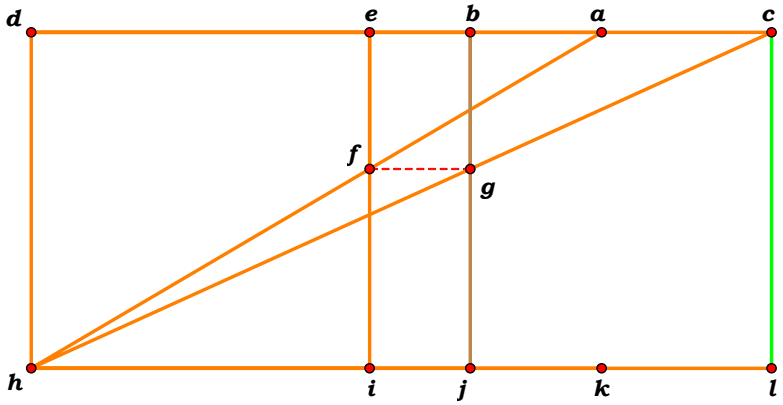
$a := 1.68587 \quad b := 1.29788$

$ei := 1$

$fi := \frac{ei}{a} \quad gj := fi \quad c := \frac{b}{gj} \quad c = 2.18806$

Unit **= 1.00000**
a **= 1.68587**
b **= 1.29788**
c **= 2.18806**
a·b **− *c* = 0.00000**

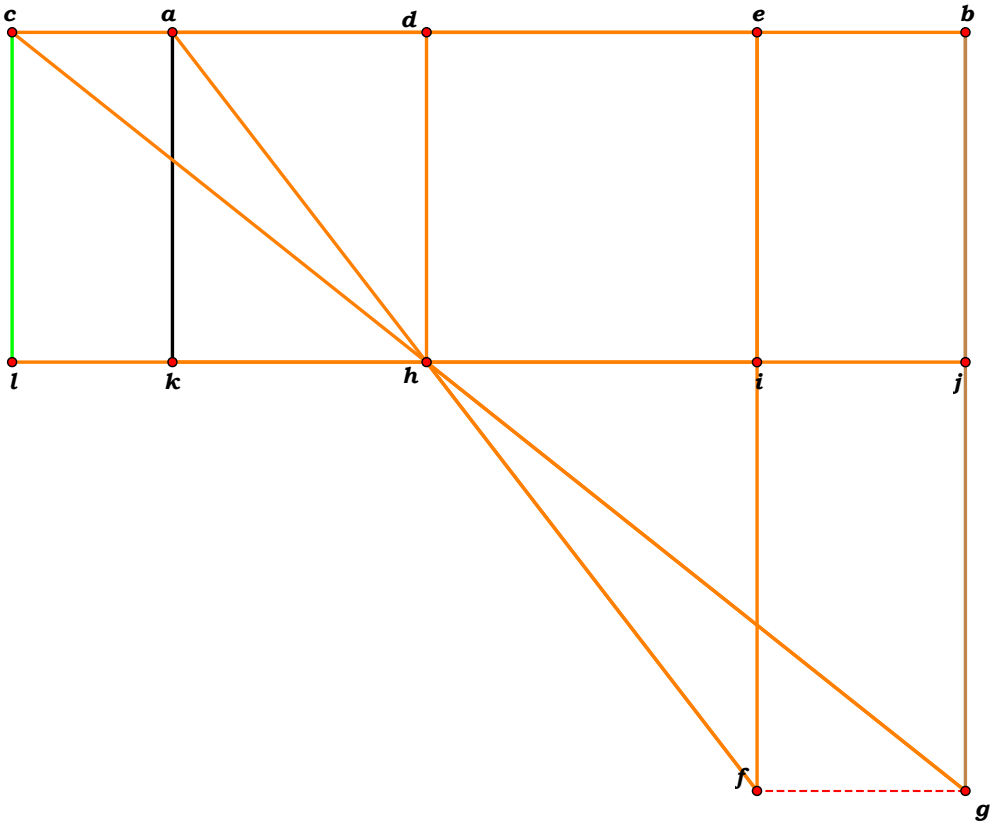
Multiplication

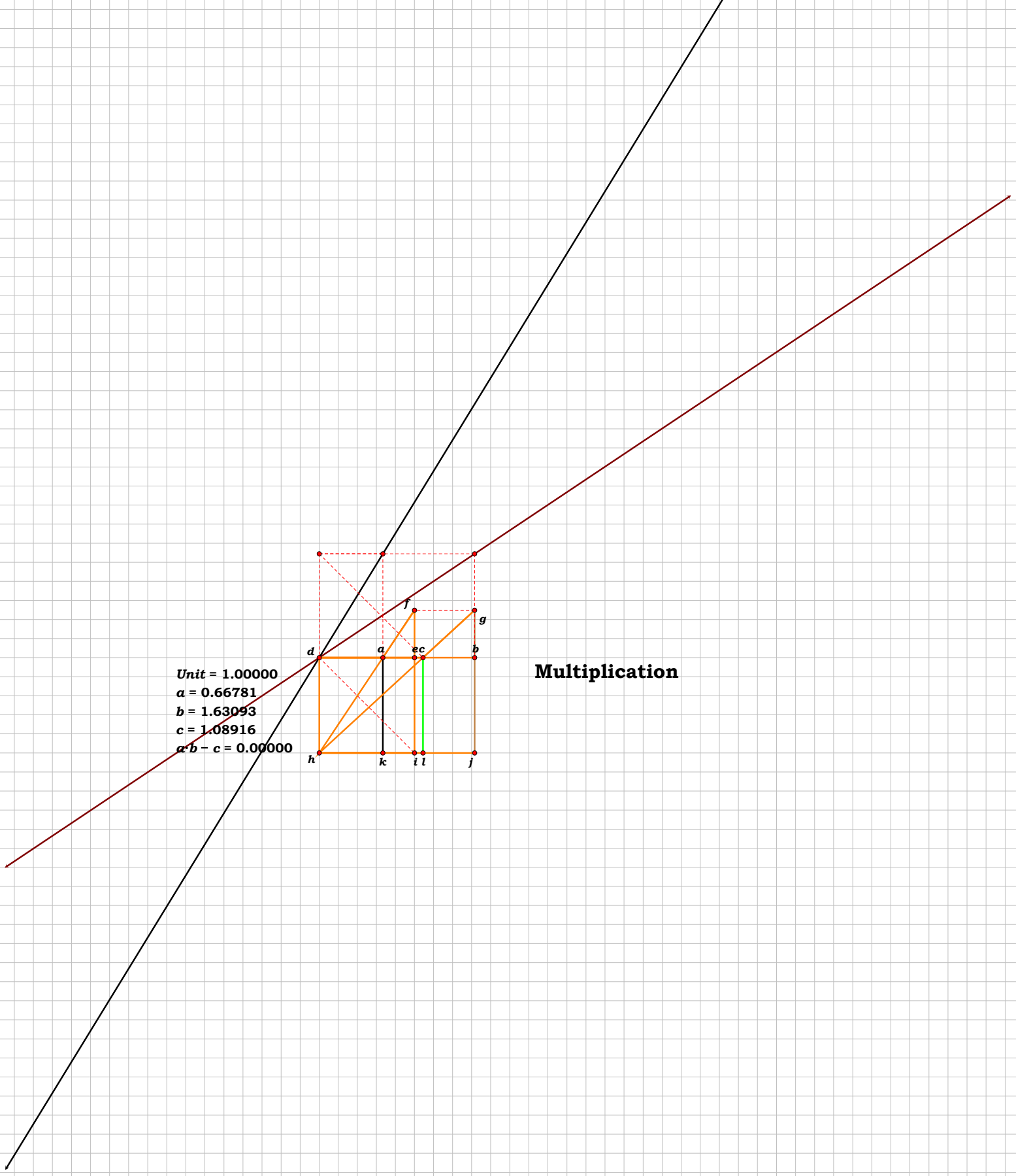


In deduction we took the proportion from the geometric diagonal, here, in the arithmetic, we take it off the arithmetic perpendicutlar as a 1 to 1.

Unit **= 1.00000**
a **= –0.76911**
b **= 1.63093**
c **= –1.25437**
a·b **− *c* = 0.00000**

Multiplication





Unit = 1.00000
a = 0.66781
b = 1.63093
c = 1.08916
a · *b* − *c* = 0.00000

Multiplication

Multiplication Deductive

a := .65886 b := .39203

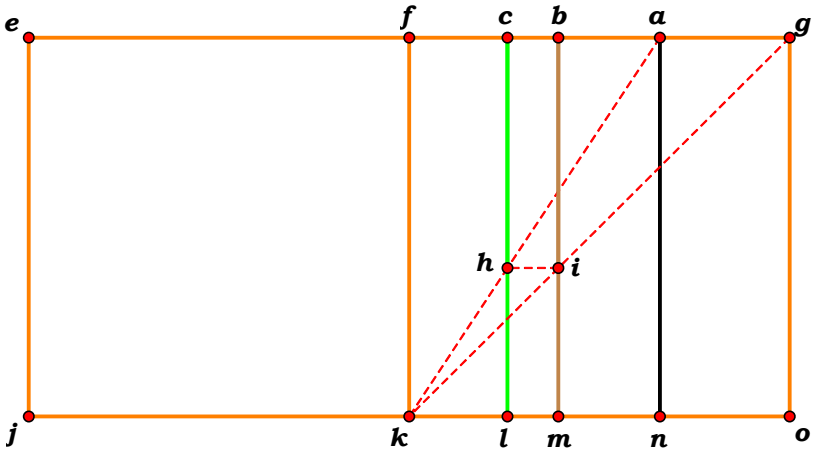
im := b hl := im c := a·hl c = 0.25829

a·b − c = 0

Multiplication and Division are not arithmetic like addition and subtraction; they are geometric, or again proportional; the diagonal gk is that unit proportion. Geometrically you can see the steps which your mind may not form unless you see it.

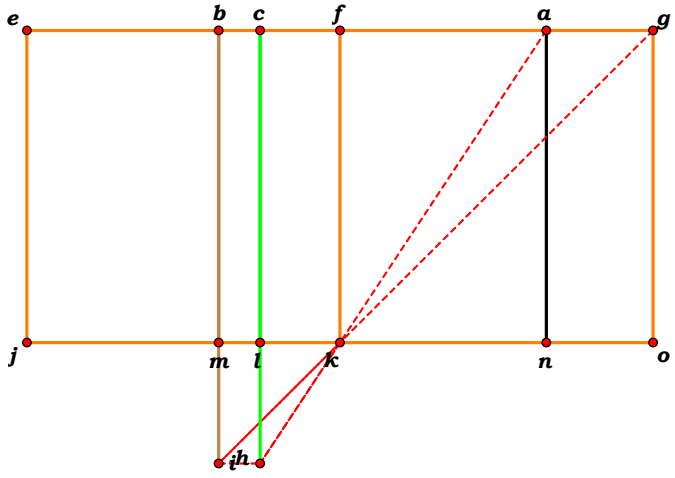
Unit = 1.00000
a = 0.65886
b = 0.39203
c = 0.25829
a·*b* − *c* = 0.00000

Multiplication



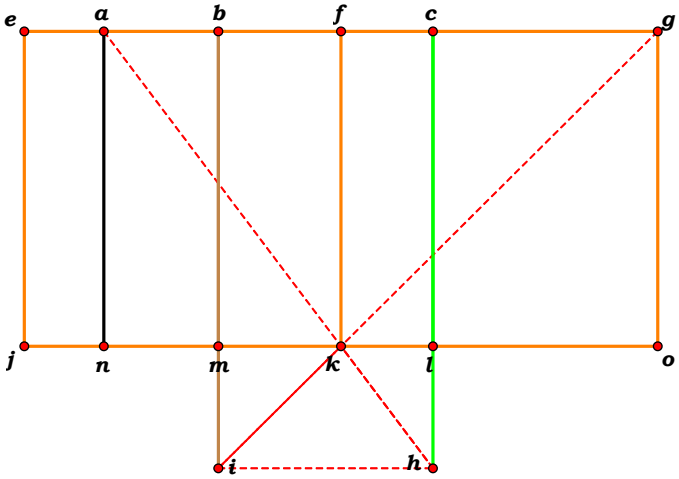
Unit = 1.00000
a = 0.65886
b = –0.38738
c = –0.25523
a·*b* − *c* = 0.00000

Multiplication

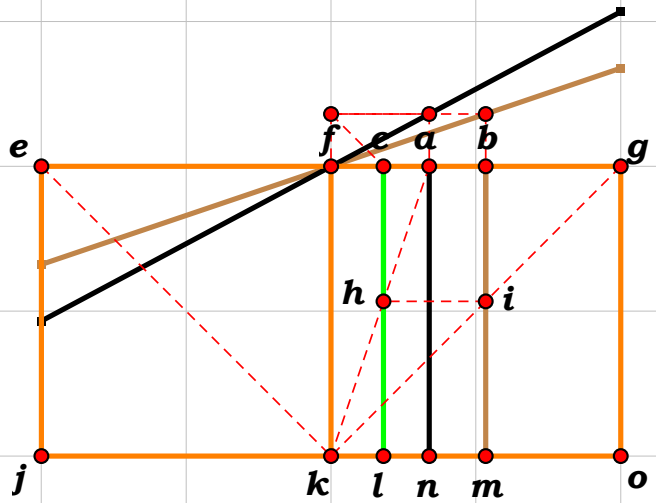


Unit = 1.00000
a = –0.74889
b = –0.38738
c = 0.29011
a·*b* − *c* = 0.00000

Multiplication

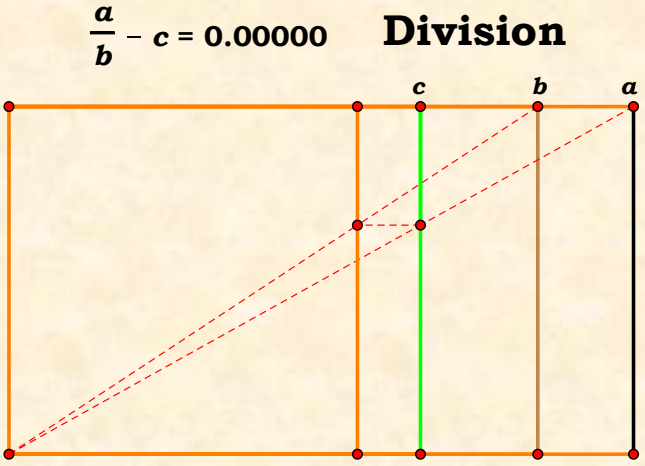


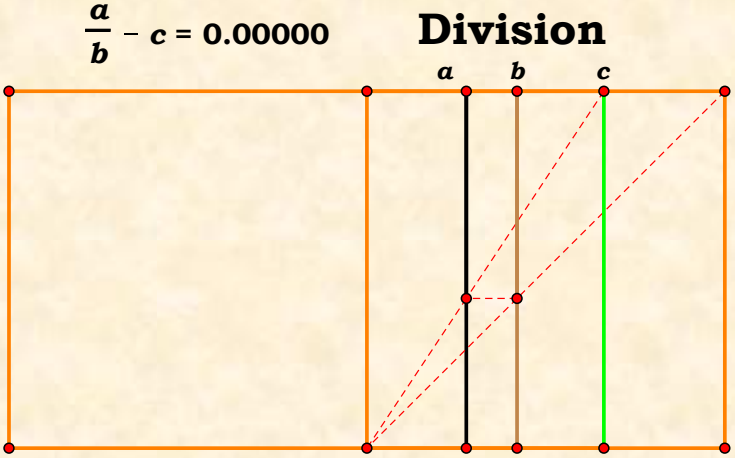
Unit = 1.00000
a = 0.33881
b = 0.53390
c = 0.18089
a·*b* − *c* = 0.00000



Multiplication

Division





Division by Induction

$a := 2.03266$ $b := 1.33908$

$d := \frac{1}{b}$ $c := a \cdot d$ $c = 1.51795$

Unit = 1.00000

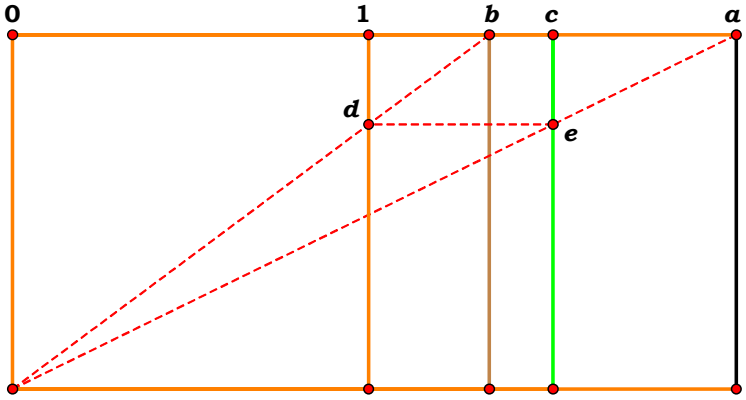
a = 2.03266

b = 1.33908

c = 1.51795

$\frac{a}{b} - c = 0.00000$

Division



Unit = 1.00000

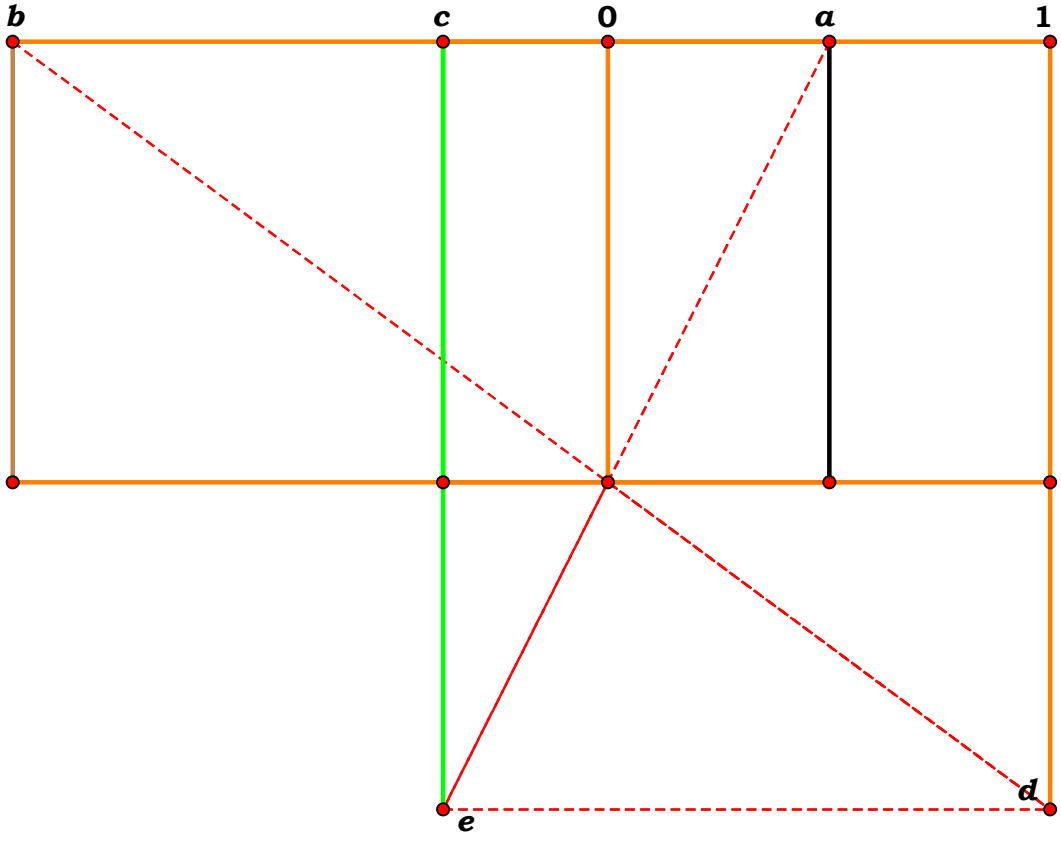
a = 0.50130

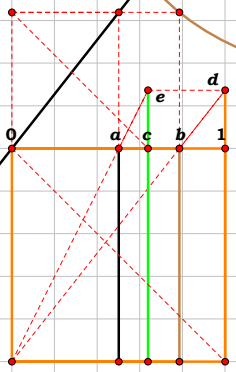
b = –1.34595

c = –0.37245

$\frac{a}{b} - c = 0.00000$

Division





Division

$Unit = 1.00000$
$a = 0.50130$
$b = 0.78536$
$c = 0.63830$
$\frac{a}{b} - c = 0.00000$

Division Deductive

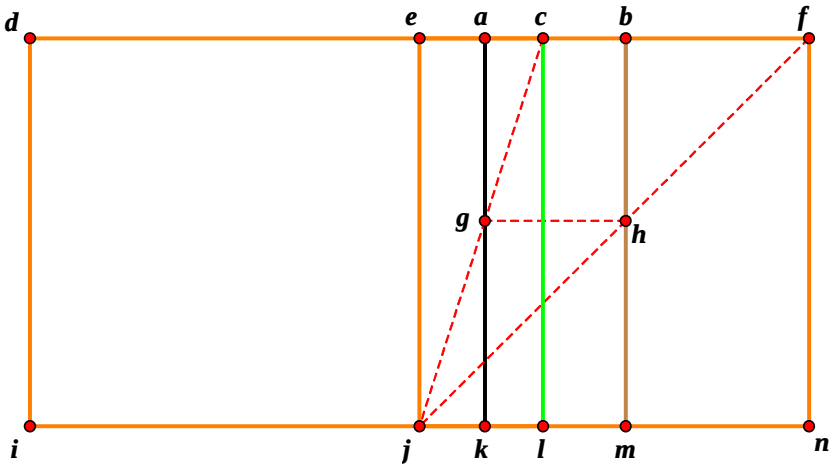
a := .16786 b := .52937

hm := b gk := hm $c := \frac{a}{gk}$ c = 0.31709

$\frac{a}{b} - c = 0$

Unit = 1.00000
a = 0.16786
b = 0.52937
c = 0.31710
$\frac{a}{b}$ = 0.31710

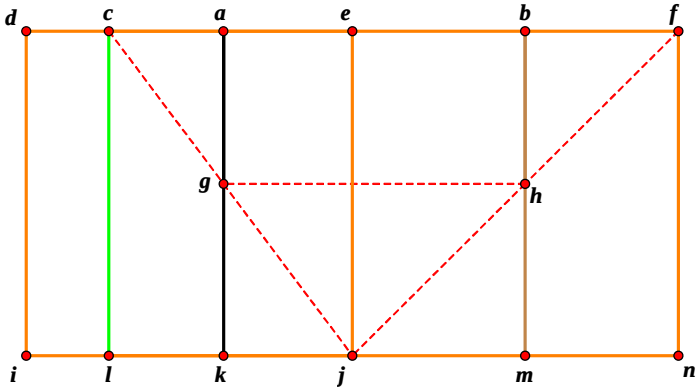
Division



Unit = 1.00000
a = –0.39524
b = 0.52937
c = –0.74661
$\frac{a}{b}$ = –0.74661

Division

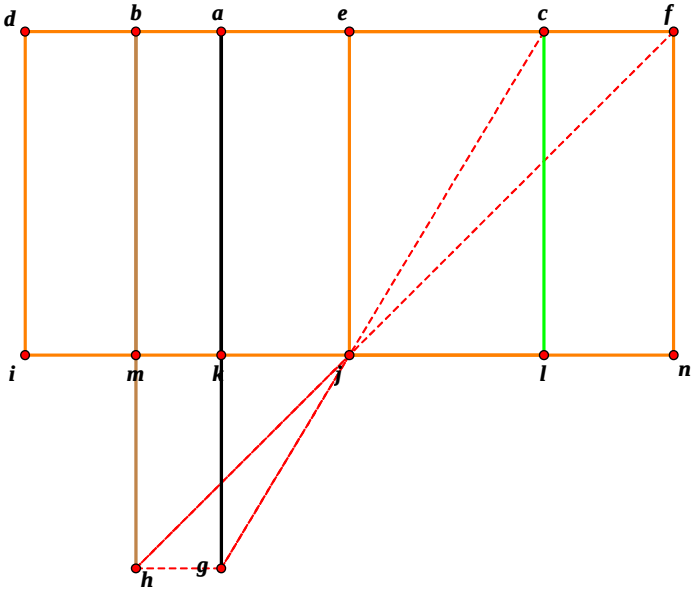
$\frac{a}{b} - c$ = 0.00000

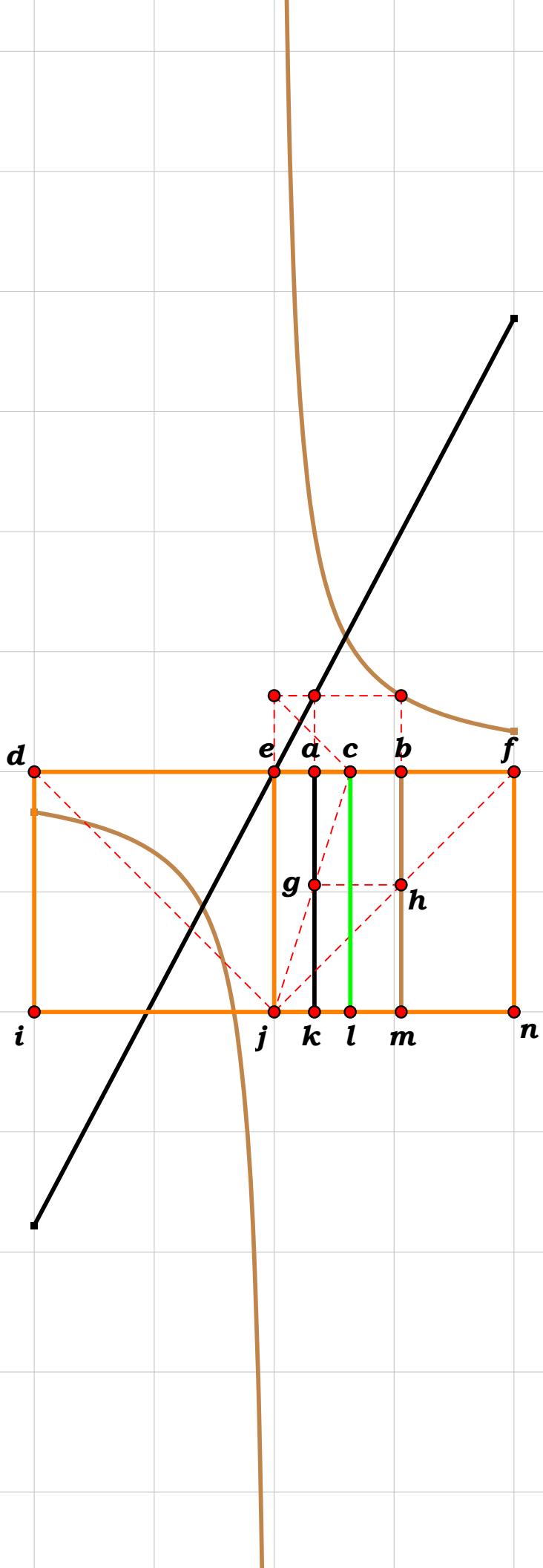


Unit = 1.00000
a = –0.39524
b = –0.65863
c = 0.60009
$\frac{a}{b}$ = 0.60009

Division

$\frac{a}{b} - c$ = 0.00000





Division

$Unit = 1.00000$

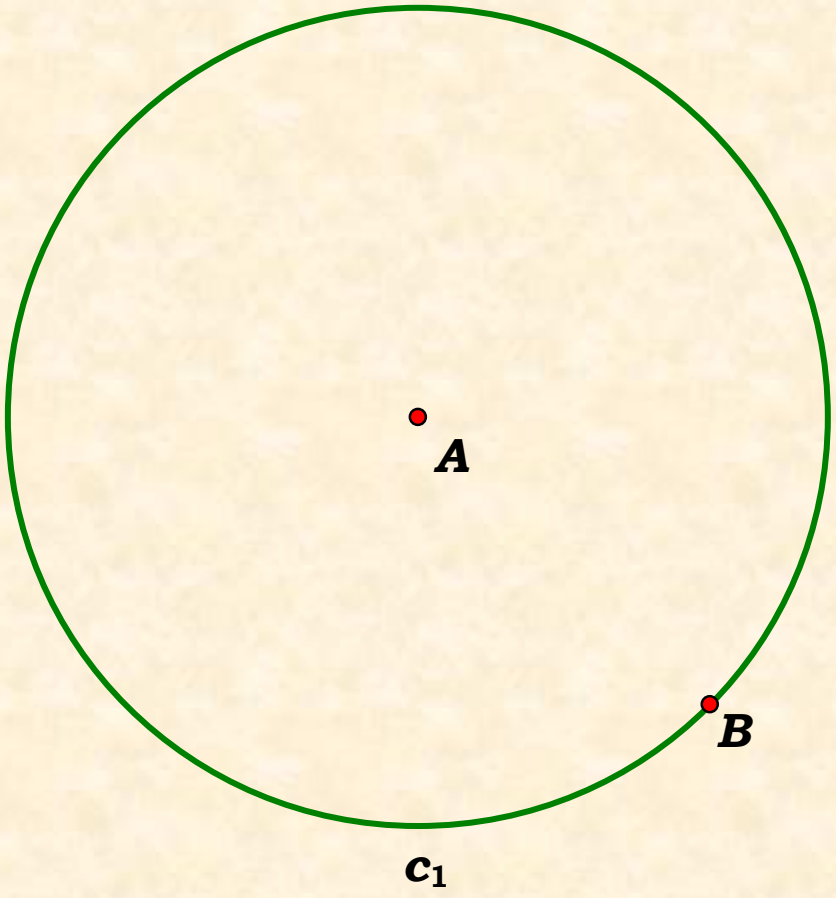
$a = 0.16786$

$b = 0.52937$

$c = 0.31710$

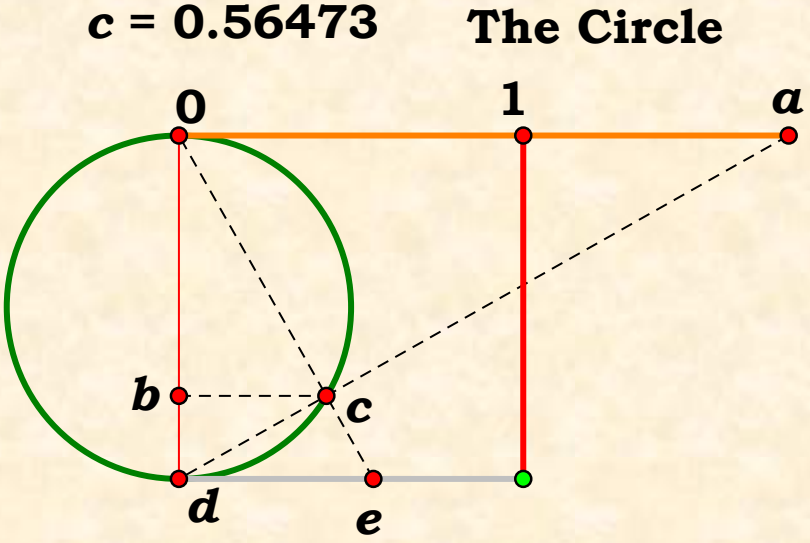
$\frac{a}{b} = 0.31710$

The Circle



The Circle

a = 1.77074
b = 0.42818
c = 0.56473



Circle Inductive

$a := 1.77074$

$ad := \sqrt{1 + a^2}$ $\quad cd := \frac{1}{ad}$

$bc := \frac{a \cdot cd}{ad}$ $\quad c := bc$ $\quad c = 0.42818$

Definitions

$ad - \sqrt{1 + a^2} = 0$ $\quad cd - \frac{1}{\sqrt{1 + a^2}} = 0$

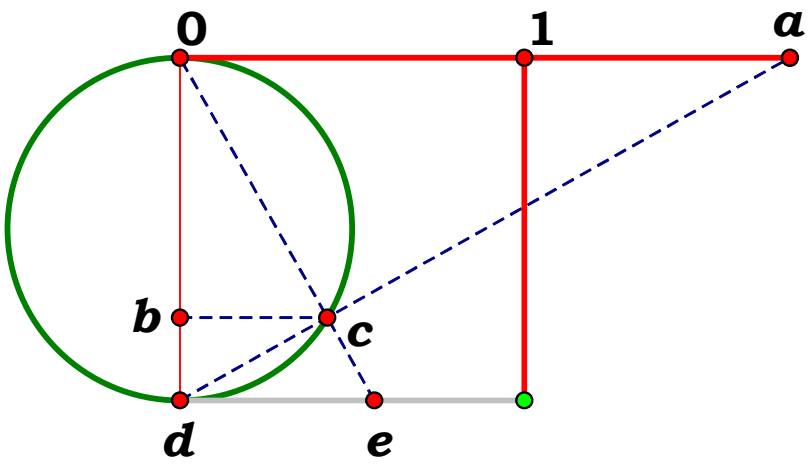
$c - \frac{a}{a^2 + 1} = 0$

$a = 1.77074$

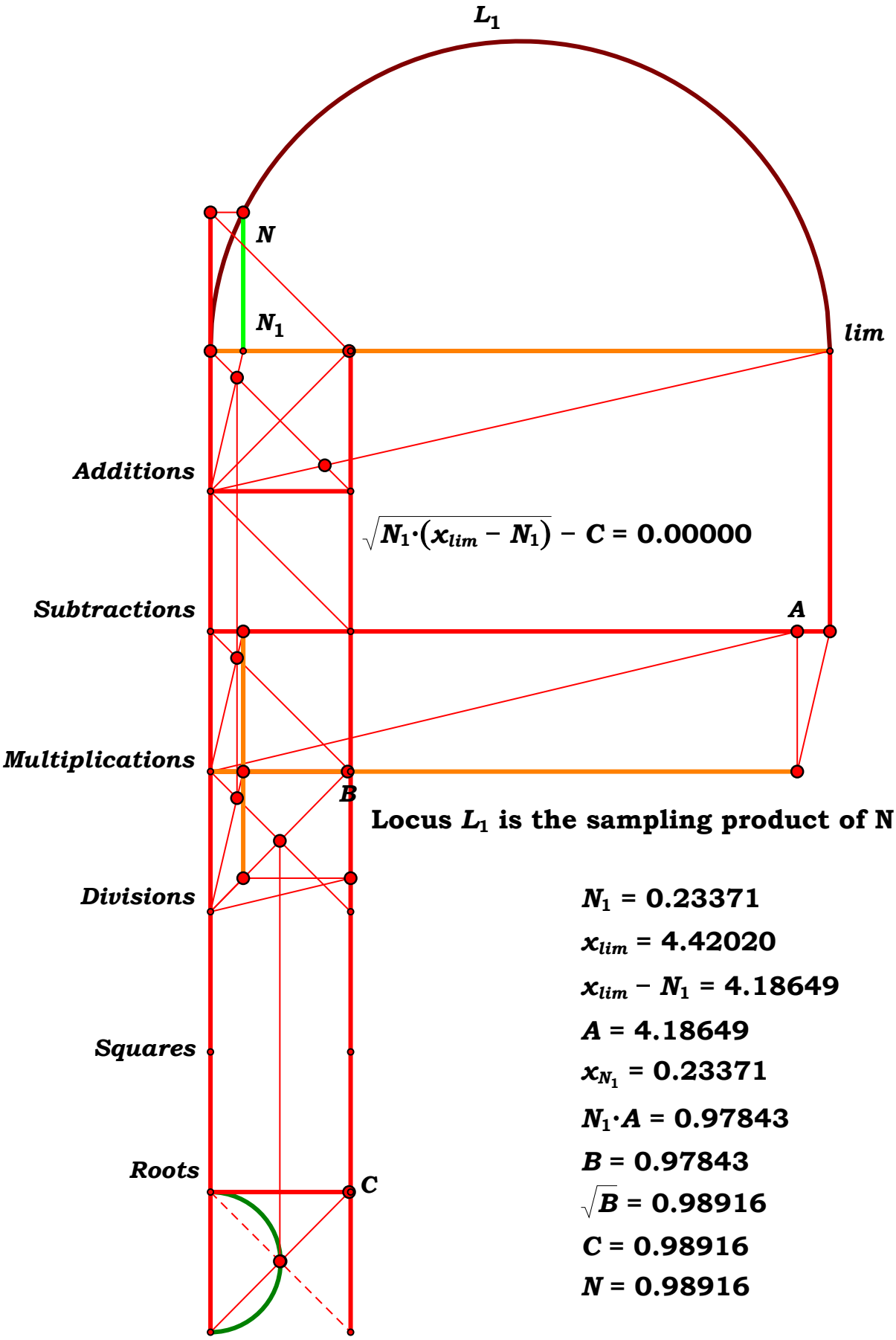
$c = 0.42818$

$d = 0.56473$

The Circle



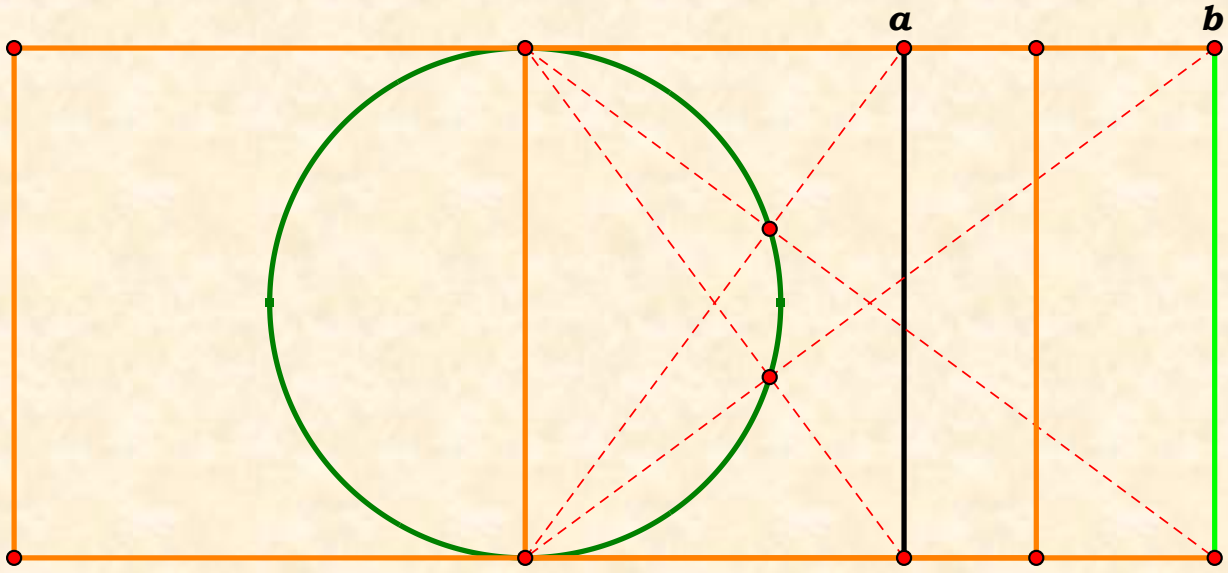
If you put the reciprocal of a into the final equation, it does not change it. This is just another way of saying that the circle is the reciprocal of every possible line, or again, one can draw a circle with only straight lines.


L_1
N
N_1
lim
Additions
$\sqrt{N_1 \cdot (x_{lim} - N_1)} - C = 0.00000$
Subtractions
A
Multiplications
B
Locus L_1 is the sampling product of N
Divisions
$N_1 = 0.23371$
$x_{lim} = 4.42020$
$x_{lim} - N_1 = 4.18649$
$A = 4.18649$
$x_{N_1} = 0.23371$
$N_1 \cdot A = 0.97843$
$B = 0.97843$
$\sqrt{B} = 0.98916$
$C = 0.98916$
$N = 0.98916$
Squares
Roots
C

The Circle

$a = 0.74127$
$b = 1.34904$

$\frac{1}{a} - b = 0.00000$



The Circle

$a := .76874 \quad ei := 1$

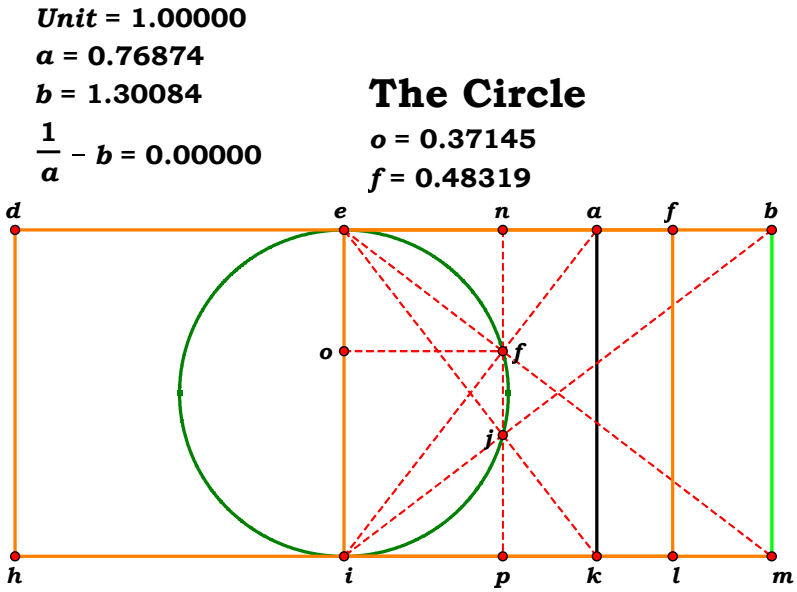
$o := .37145 \quad f := .48319$

$ae := a \quad be := \frac{1}{ae} \quad be = 1.30083$

$b := be \quad \frac{1}{a} - b = 0 \quad eo := a$

$n := \frac{a \cdot b}{a + b} \quad fo := n \quad eo := \frac{1 \cdot n}{b} \quad io := 1 - eo$

$n - \sqrt{io \cdot (1 - io)} = 0$



The Circle Deductive and Inductive

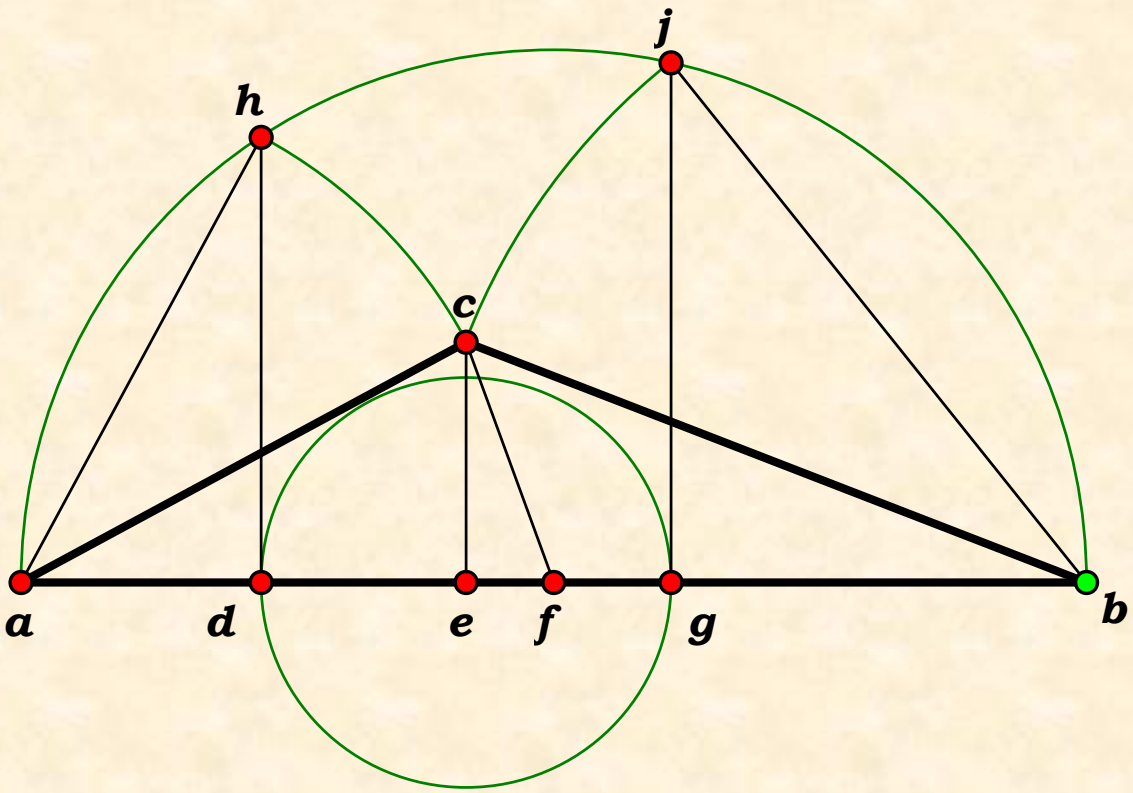
This equation is why Euclid did not made a big deal out of the Pythagorean equation, as it was known before hand. The perpendicular of an line to a diameter is equal to the square root of the two segments of a diameter diviided by that perpendicular. And, since this equation was not recognized by a lot of people, even though given in the Elements, made them ask, well, what is the equation of a circle? It is right there in the pages of Euclid.

If one study the figure, one may realize that Deduction produces the upper semi-circle, while Inductive produces the bottom simi-circle, so the two halves of a circle are distincguished by one half is produced by deduction, while the other induction. This is a topic worth taking the time to examine.

The result is, Induction is the Reciprocal of Deduction. This means that although, inductively, we cannot perceive perceptible infinity, we certainly can represent any infinite distance within a unit segment, i.e., infinity is comprehended in that manner, reciprocally.

In this wise, as the Unite is used for both the unit and Universe of discourse, i.e., complete Induction and Deducation, this propery of closure is exampled as above, in the construction of the circle itself. Most people just know the circle, produced by a perceptible compass, and not by the intelligible geometry of it. The compass, is not then a restriction upon Geometry, but a simple convienence.

Pythagoras Revisited



Pythagoras Revisited

Early in writing equations one is going to run into a puzzle. Let us examine the puzzle.

The relative difference, how many relative differences does one actually perceive? Let us say, just one. What happens when I start to parse it?

All of a sudden, we apply order. Now, here is the question. When I name anything, is the process of naming, itself, adding to or subtracting from what is named? If it did, would names be a reliable form of reasoning about things? Or, are we subjectively adding to perception, that which is wholly intelligible?

This is a common and fundamental mistake in learning grammar, projecting information into the process which should not be done, if one is going to have a correct system of grammar.

The order that the letters were written does not exist in the thing described. I could have written them in the opposite order.

Think about this now, in relation to mathematical operators. Does a sign, + or – mean the same thing as making something either greater or lesser? When we parse the abstract relative difference, which is not a thing, is there such a notion, in regard to that relative, of another relative, of positions, left, right, etc?

When one parses, and name, one must be cognizant of the fact that there is a difference between the ordering of a naming convention, such that we do not confuse the conventional, with the data to which it is applied. Today we have hordes of mental invalids who cannot do that.

The difference between a and b, does not mean that if I read it in one direction it is positive, but if I read it in the reverse direction that it is negative, yet armies of the simple minded insist that this is the case. That is how they form their brain-dead mythologies.

Teachers, teach and insist on the maintenance of this mythology. Perhaps, for them, it is just true that they find it too hard to think. So, when I write a – b, am I writing a subtracting b, or am I writing, the difference between a and b is changed?

The difference is actually one dimensional, however, if I now say that direction is to be added, then that is two dimensional, i.e., difference and direction, which is not the same thing.

It has then become customary to teach such nonsense as absolute value $|a|$, for example, and the logical operation performed by $\sqrt{a^2}$, to fix our equations,

instead of adding another symbol itself in an orderly fashion, two symbols for difference. Without symbols, to denote the distinctions between to different concepts, we have to, now, be very careful in examining the results of what we write, when we mean difference, and just use the minus symbol, we may have unintentionally caused a fallacy in what we wrote. So, I put this demonstration in two forms, one in which I am careless, which I was, and the other how to fix it using the common way to fix a mess.

So, we discarded the equations for the helpers, which are not always present, but some went on to claim a mathematics of the imaginary, I just discard them, and we had to fix two of the equations using the square root function to construct a logical operator.

Pythagoras Revisited Plate 1

$ab := 10.32521 \quad bc := 6.44758$

$ac := 4.90108$

Descriptions:

$ad := \frac{ac^2}{ab} \quad bg := \frac{bc^2}{ab}$

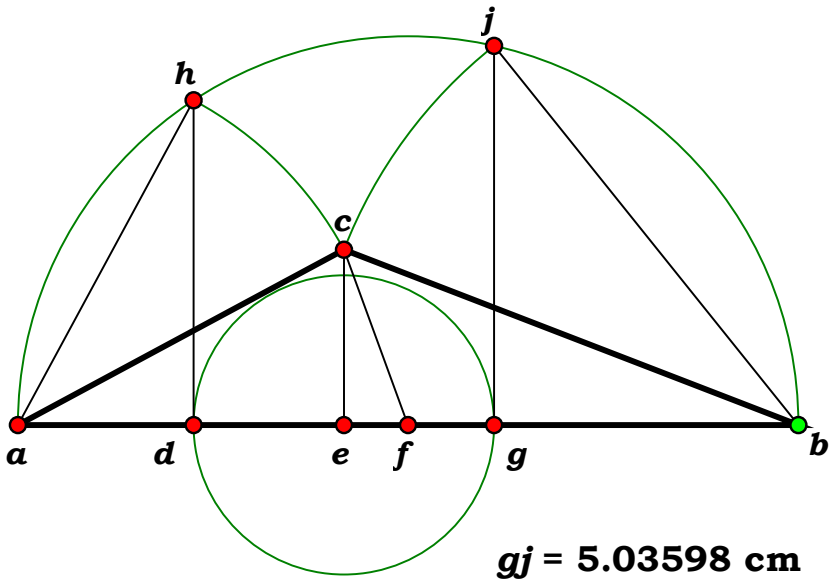
$dg := ab - (ad + bg) \quad de := \frac{dg}{2}$

$ae := ad + de \quad ce := \sqrt{ac^2 - ae^2}$

$af := \frac{ab}{2} \quad ef := af - ae$

$cf := \sqrt{ce^2 + ef^2} \quad ae = 4.31271$

$ef = 0.8499 \quad cf = 2.4786$



***ab* = 10.32521 cm**
***bc* = 6.44758 cm**
***ac* = 4.90108 cm**
***ah* = 4.90108 cm**
***dh* = 4.31375 cm**
***bj* = 6.44758 cm**

***gj* = 5.03598 cm**
***ce* = 2.32833 cm**
***cf* = 2.47860 cm**
***ad* = 2.32640 cm**
***ae* = 4.31271 cm**
***ef* = 0.84990 cm**
***bd* = 7.99881 cm**

Definitions:

$$ad - \frac{ac^2}{ab} = 0 \quad bg - \frac{bc^2}{ab} = 0 \quad dg - \frac{ab^2 - ac^2 - bc^2}{ab} = 0 \quad de - \frac{ab^2 - ac^2 - bc^2}{2 \cdot ab} = 0$$

$$ae - \frac{ab^2 + ac^2 - bc^2}{2 \cdot ab} = 0 \quad ce - \frac{\sqrt{(ab + ac + bc) \cdot (ab + ac - bc) \cdot (ab - ac + bc) \cdot (ac - ab + bc)}}{2 \cdot ab} = 0$$

$$af - \frac{ab}{2} = 0 \quad ef - \frac{bc^2 - ac^2}{2 \cdot ab} = 0 \quad cf - \frac{\sqrt{2 \cdot \left(ac^2 + bc^2\right) - ab^2}}{2} = 0$$

Pythagoras Revisited Plate 2

$ab := 10.32521 \quad bc := 6.44758$

$ac := 4.90108$

Descriptions:

$ad := \frac{ac^2}{ab} \quad bg := \frac{bc^2}{ab}$

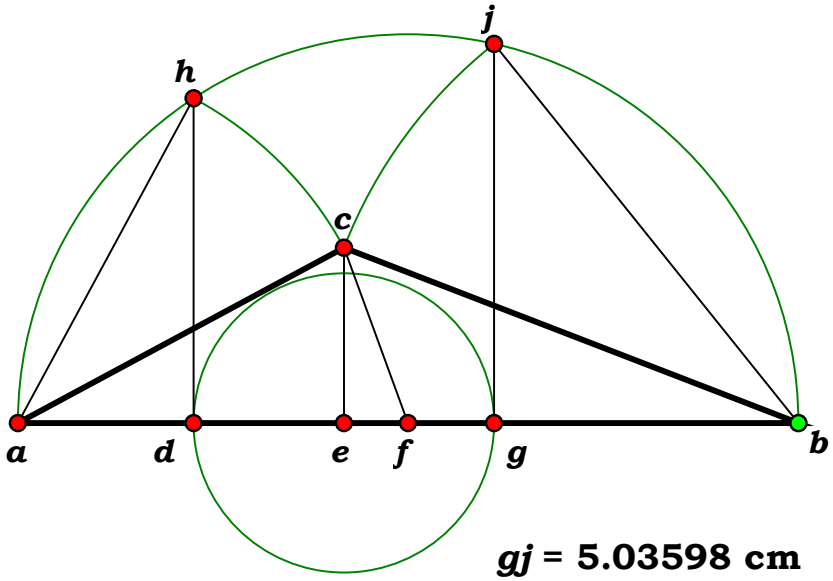
$dg := ab - (ad + bg) \quad de := \frac{dg}{2}$

$ae := ad + de \quad ce := \sqrt{ac^2 - ae^2}$

$af := \frac{ab}{2} \quad ef := af - ae$

$cf := \sqrt{ce^2 + ef^2} \quad ae = 4.31271$

$ef = 0.8499 \quad cf = 2.4786$



***ab* = 10.32521 cm**
***bc* = 6.44758 cm**
***ac* = 4.90108 cm**
***ah* = 4.90108 cm**
***dh* = 4.31375 cm**
***bj* = 6.44758 cm**

***gj* = 5.03598 cm**
***ce* = 2.32833 cm**
***cf* = 2.47860 cm**
***ad* = 2.32640 cm**
***ae* = 4.31271 cm**
***ef* = 0.84990 cm**
***bd* = 7.99881 cm**

Definitions:

$ad - \frac{ac^2}{ab} = 0 \quad bg - \frac{bc^2}{ab} = 0 \quad dg - \frac{\sqrt{\left(ab^2 - ac^2 - bc^2\right)^2}}{ab} = 0 \quad de - \frac{\sqrt{\left(ab^2 - ac^2 - bc^2\right)^2}}{2 \cdot ab} = 0$

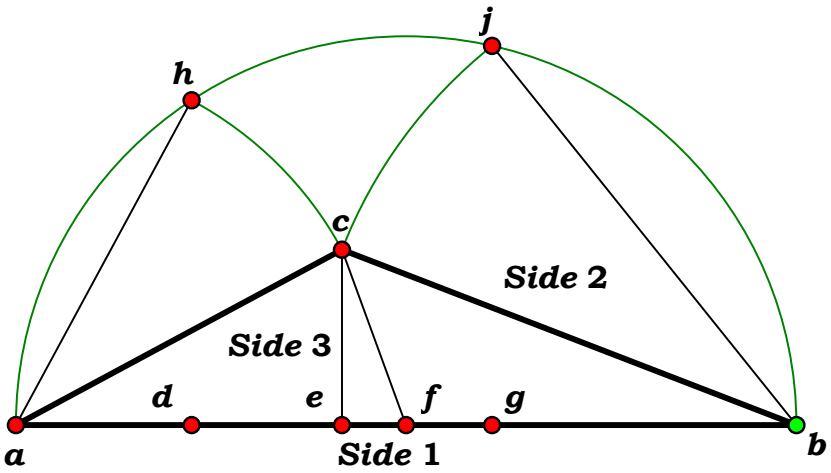
$ae - \frac{\sqrt{\left(ab^2 + ac^2 - bc^2\right)^2}}{2 \cdot ab} = 0 \quad af - \frac{ab}{2} = 0 \quad ef - \frac{\sqrt{\left(bc^2 - ac^2\right)^2}}{2 \cdot ab} = 0$

$ce - \frac{\sqrt{(ab + ac + bc) \cdot (ab + ac - bc) \cdot (ab - ac + bc) \cdot (ac - ab + bc)}}{2 \cdot ab} = 0$

$cf - \frac{\sqrt{2 \cdot ac^2 - ab^2 + 2 \cdot bc^2}}{2} = 0$

What does this figure introduce to us? It introduces the idea that the square root notation has a second function, that function is a logical operator. The Square Root of a Square is always positive. It is actually a logical operator by accident, for, when we think of addition and subtraction, we do not realize that we are implying direction. This means that there is a logical idea missing, simply the idea of difference.

Conventional



$S_1 := ab \quad S_2 := bc \quad S_3 := ac$

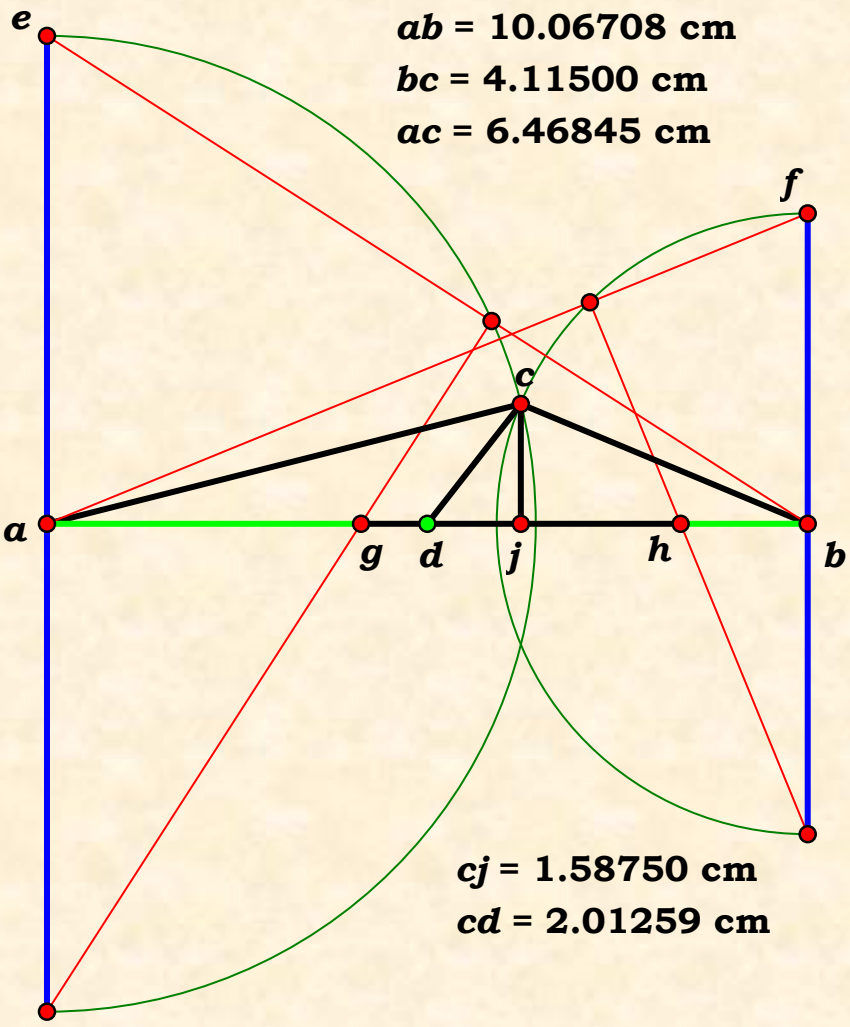
$$dg - \frac{\sqrt{\left(S_1^{\,2} - S_3^{\,2} - S_2^{\,2}\right)^2}}{S_1} = 0$$

$$af - \frac{S_1}{2} = 0 \qquad ef - \frac{\sqrt{\left(S_2^{\,2} - S_3^{\,2}\right)^2}}{2 \cdot S_1} = 0$$

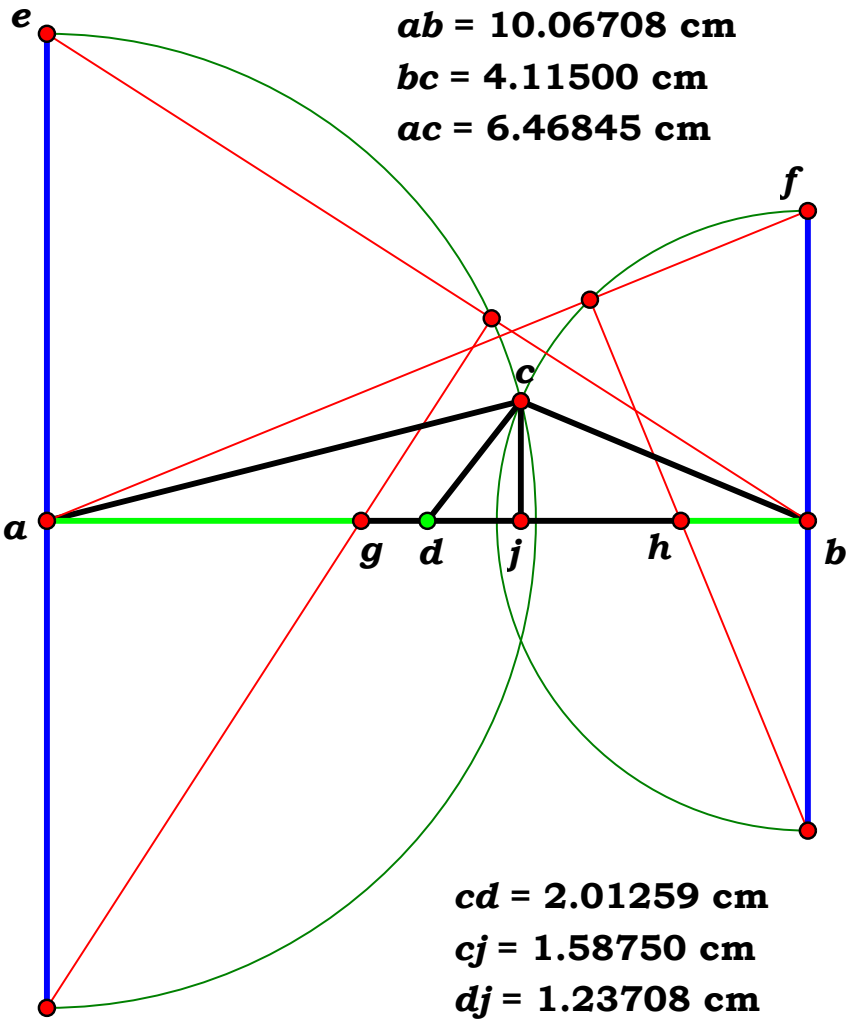
$$ce - \frac{\sqrt{\left(S_1 + S_3 + S_2\right) \cdot \left(S_1 + S_3 - S_2\right) \cdot \left(S_1 - S_3 + S_2\right) \cdot \left(S_3 - S_1 + S_2\right)}}{2 \cdot S_1} = 0$$

$$cf - \frac{\sqrt{2 \cdot S_3^{\,2} - S_1^{\,2} + 2 \cdot S_2^{\,2}}}{2} = 0$$

Pythagoras Revisited Again



Power-Line Method



$ab = 10.06708$ cm
$bc = 4.11500$ cm
$ac = 6.46845$ cm

$cd = 2.01259$ cm
$cj = 1.58750$ cm
$dj = 1.23708$ cm

Pythagoras Revisited Again

Given:

$ab := 10.06708$

$bc := 4.11500$

$ac := 6.46845$

Descriptions:

$ag := \frac{ac^2}{ab}$ $\quad bh := \frac{bc^2}{ab}$

$gh := ab - (ag + bh)$ $\quad gj := \frac{gh}{2}$

$aj := ag + gj$ $\quad bj := bh + gj$

$cj := \sqrt{ac^2 - aj^2}$ $\quad ad := \frac{ab}{2}$

$dj := \sqrt{(aj - ad)^2}$ $\quad cd := \sqrt{dj^2 + cj^2}$

$dj = 1.23708$

$cd = 2.01259$

$cj = 1.58749$

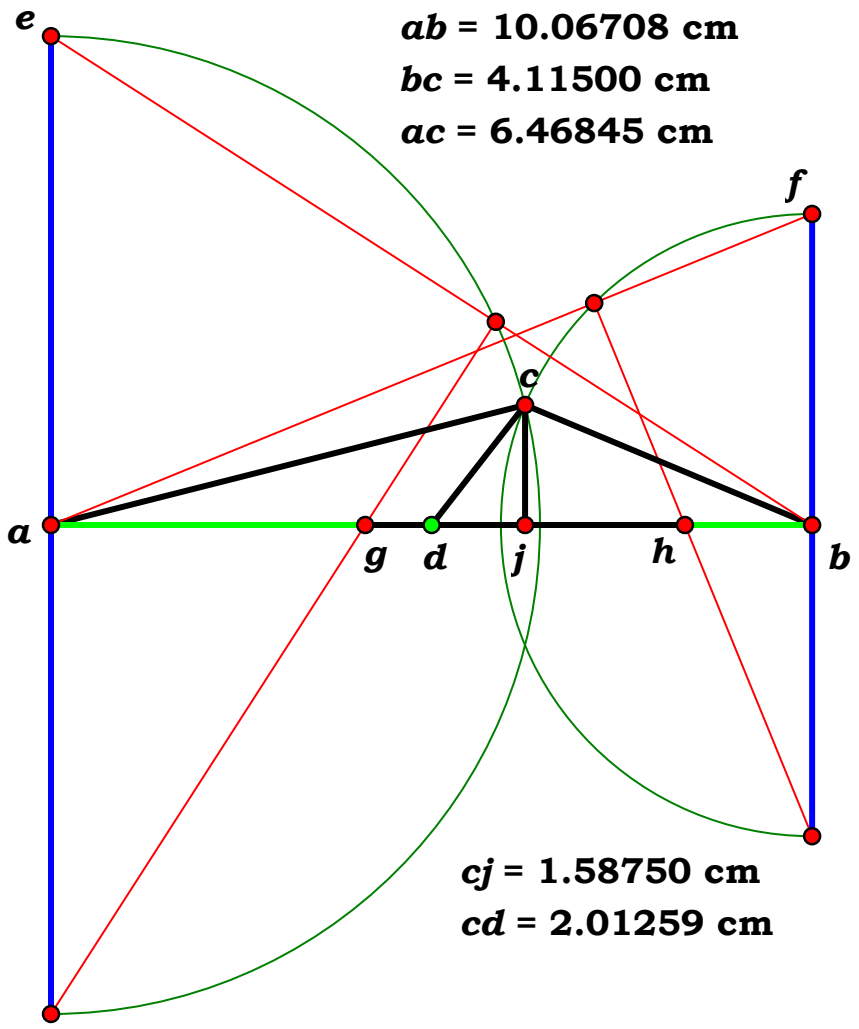
Definitions:

$$ag - \frac{ac^2}{ab} = 0 \quad bh - \frac{bc^2}{ab} = 0 \quad gh - \frac{ab^2 - ac^2 - bc^2}{ab} = 0$$

$$gj - \frac{ab^2 - ac^2 - bc^2}{2 \cdot ab} = 0 \quad aj - \frac{ab^2 + ac^2 - bc^2}{2 \cdot ab} = 0 \quad ad - \frac{ab}{2} = 0$$

$$bj - \frac{ab^2 - ac^2 + bc^2}{2 \cdot ab} = 0 \quad cj - \frac{\sqrt{ab + ac + bc} \cdot \sqrt{ab + ac - bc} \cdot \sqrt{ab - ac + bc} \cdot \sqrt{ac - ab + bc}}{2 \cdot ab} = 0$$

$$dj - \frac{\sqrt{(ac - bc)^2} \cdot \sqrt{(ac + bc)^2}}{2 \cdot ab} = 0 \quad cd - \frac{\sqrt{2 \cdot ac^2 - ab^2 + 2 \cdot bc^2}}{2} = 0$$


e
ab = 10.06708 cm
bc = 4.11500 cm
ac = 6.46845 cm
f
c
a
g
d
j
h
b
cj = 1.58750 cm
cd = 2.01259 cm

$ab = 7.66781$ cm

$bc = 8.93707$ cm

$ac = 6.33748$ cm

$cd = 6.21405$ cm

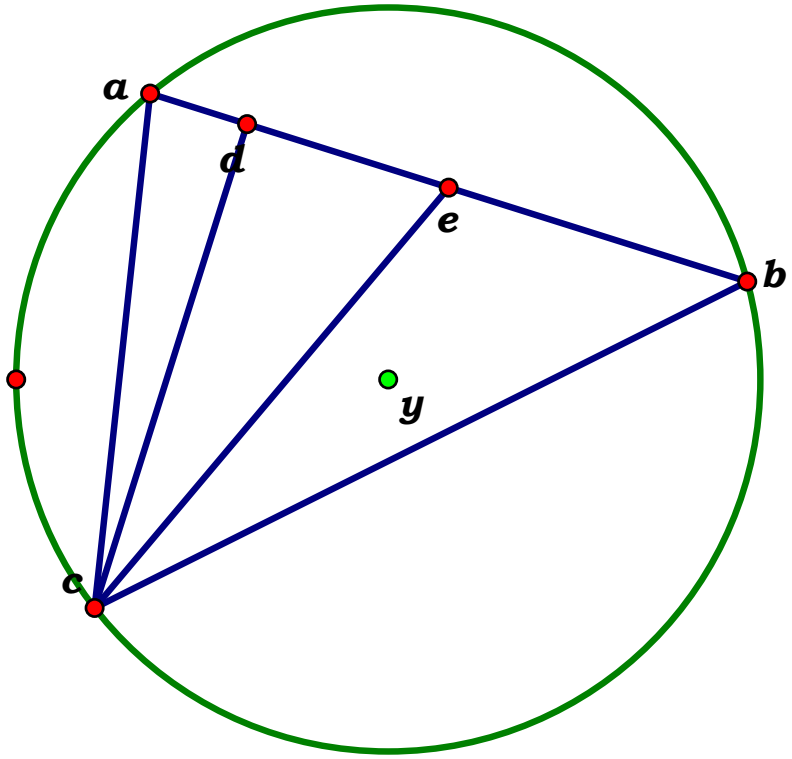
$ce = 6.73191$ cm

$\sqrt{ab + bc + ac} = 4.78982$

$\sqrt{ab + bc - ac} = 3.20428$

$\sqrt{ab - bc + ac} = 2.25127$

$\sqrt{bc + ac - ab} = 2.75803$



$$\frac{\sqrt{ab + bc + ac}\cdot\sqrt{ab + bc - ac}\cdot\sqrt{ab - bc + ac}\cdot\sqrt{bc + ac - ab}}{2\cdot ab} - cd = 0.00000$$

$$\frac{\sqrt{2\cdot ac^2 - ab^2 + 2\cdot bc^2}}{2} - ce = 0.00000 \text{ cm}$$

Animate Point

Animate Point

Animate Point

$ab = 5.18592$ cm

$bc = 2.97578$ cm

$ac = 7.34890$ cm

$cd = 2.39931$ cm

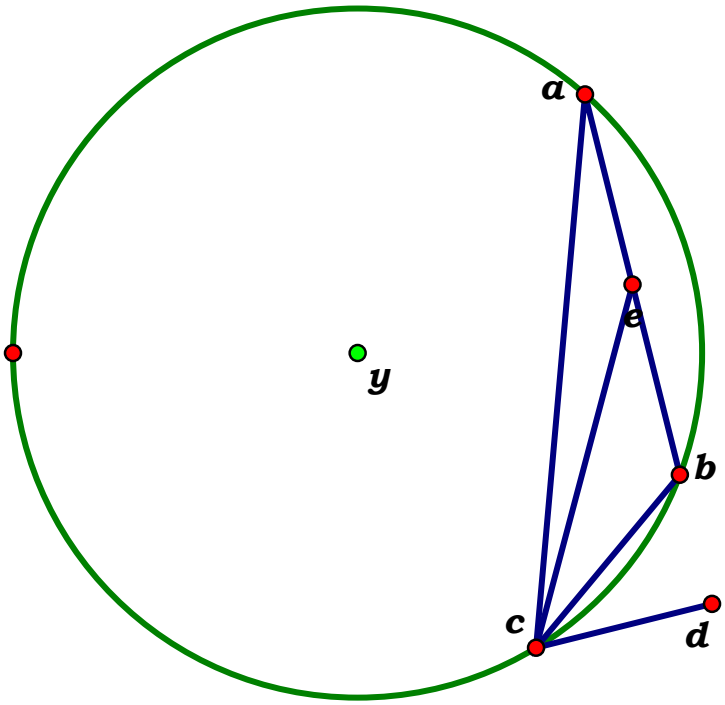
$ce = 4.97065$ cm

$\sqrt{ab + bc + ac} = 3.93835$

$\sqrt{ab + bc - ac} = 0.90155$

$\sqrt{ab - bc + ac} = 3.09177$

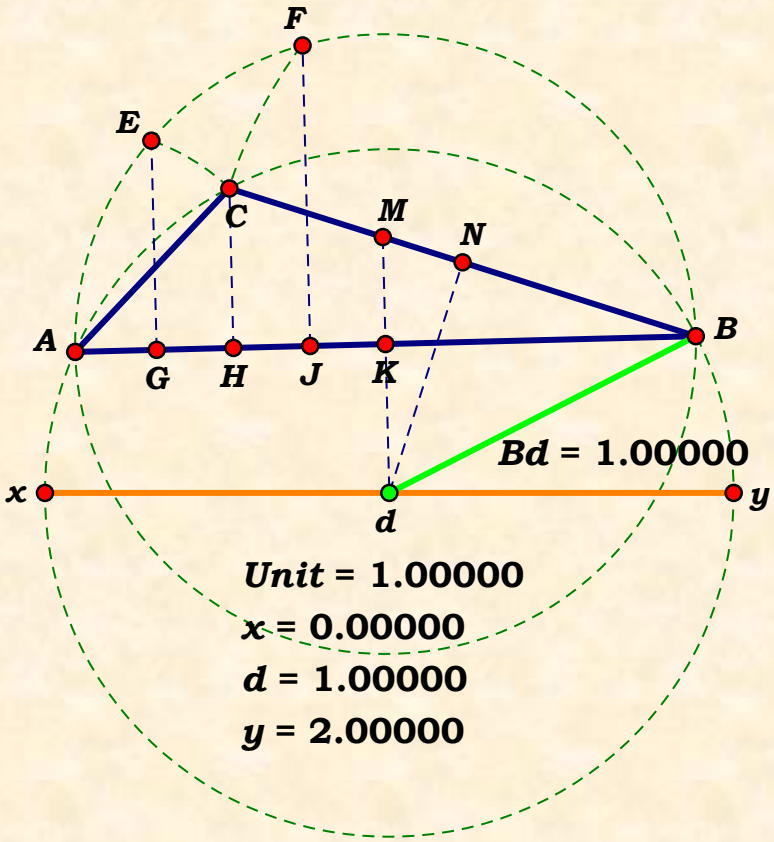
$\sqrt{bc + ac - ab} = 2.26688$



$$\frac{\sqrt{ab + bc + ac}\cdot\sqrt{ab + bc - ac}\cdot\sqrt{ab - bc + ac}\cdot\sqrt{bc + ac - ab}}{2\cdot ab} - cd = 0.00000$$

$$\frac{\sqrt{2\cdot ac^2 - ab^2 + 2\cdot bc^2}}{2} - ce = 0.00000 \text{ cm}$$

Circumscription



AB = 1.80266

BC = 1.42104

AC = 0.65300

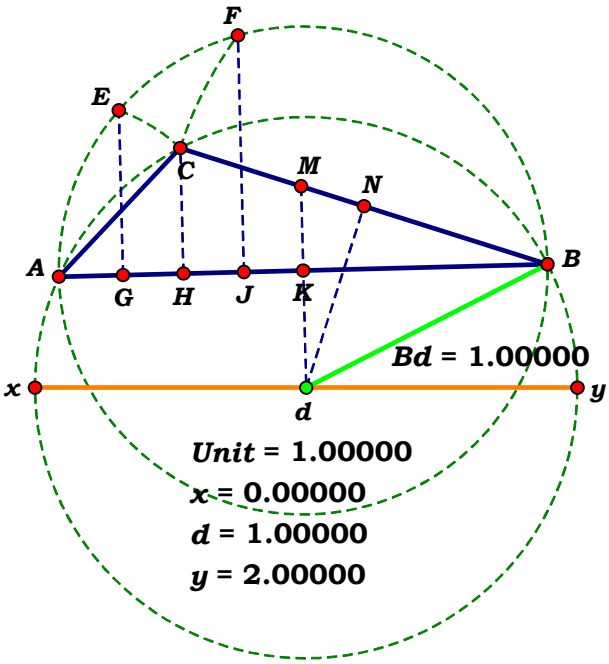
dN = 0.70368

Circumscription

The demonstration went perfectly. You can, as I do, animate the figure and watch the results for every possible triangle, the result does not change. But what is the method of my demonstration based on? Actually, Plato describes it in his dialogs. After working our your reasonings, you work them back down to first Principles, arriving at a truth independent of any particular thing, a Universal, which is then used as a standard which can be applied to every possible particular example.

The First Principles are your givens. We are only given the three sides of a triangle, and the fact that every triangle has its vertices on the diameter of a circle. From that we can then work out the math, and imagine that, I worked it out in one standard page, so not very difficult at all.

What comes next? Dispelling the Myths of Trigonometers.



AB = 1.80266
BC = 1.42104
AC = 0.65300
dN = 0.70368

Circumscription:

Given:

$AB := 1.80266 \quad BC := 1.42104 \quad AC := .653001$

Descriptions:

$$AG := \frac{AC^2}{AB} \quad BJ := \frac{BC^2}{AB} \quad GJ := AB - (AG + BJ)$$

$$AJ := AG + \frac{GJ}{2} \quad BH := BJ + \frac{GJ}{2} \quad AK := \frac{AB}{2}$$

$$CH := \sqrt{AC^2 - AJ^2} \quad KM := \frac{CH \cdot AK}{BH} \quad BN := \frac{BC}{2}$$

$$BM := \frac{BC \cdot KM}{CH} \quad MN := BM - BN \quad dN := \frac{BH \cdot MN}{CH}$$

$$Bd := \sqrt{BN^2 + dN^2} \qquad Bd = 1$$

Definitions:

$$AG - \frac{AC^2}{AB} = 0 \quad BJ - \frac{BC^2}{AB} = 0 \quad GJ - \frac{AB^2 - AC^2 - BC^2}{AB} = 0 \quad AJ - \frac{AB^2 + AC^2 - BC^2}{2 \cdot AB} = 0$$

$$BH - \frac{AB^2 - AC^2 + BC^2}{2 \cdot AB} = 0 \quad AK - \frac{AB}{2} = 0$$

$$CH - \frac{\sqrt{(AB + AC - BC) \cdot (AB - AC + BC) \cdot (AC - AB + BC) \cdot (AB + AC + BC)}}{2 \cdot AB} = 0$$

$$KM - \frac{AB \cdot \sqrt{(AB + AC - BC) \cdot (AB - AC + BC) \cdot (AC - AB + BC) \cdot (AB + AC + BC)}}{2 \cdot \left(AB^2 - AC^2 + BC^2\right)} = 0$$

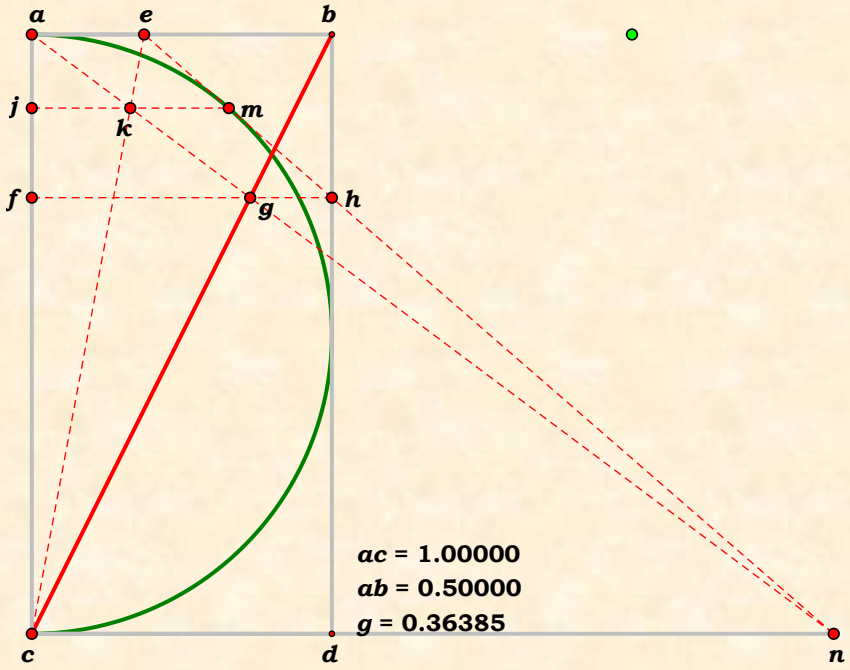
$$BN - \frac{BC}{2} = 0 \quad BM - \frac{AB^2 \cdot BC}{AB^2 - AC^2 + BC^2} = 0 \quad MN - \frac{BC \cdot \left(AB^2 + AC^2 - BC^2\right)}{2 \cdot \left(AB^2 - AC^2 + BC^2\right)} = 0$$

$$dN - \frac{BC \cdot \left(AB^2 + AC^2 - BC^2\right)}{2 \cdot \sqrt{(AB + AC - BC) \cdot (AB - AC + BC) \cdot (AC - AB + BC) \cdot (AB + AC + BC)}} = 0$$

$$Bd - \frac{AB \cdot AC \cdot BC}{\sqrt{AB + AC - BC} \cdot \sqrt{AB - AC + BC} \cdot \sqrt{AC - AB + BC} \cdot \sqrt{AB + AC + BC}} = 0$$

Curve of the Equation

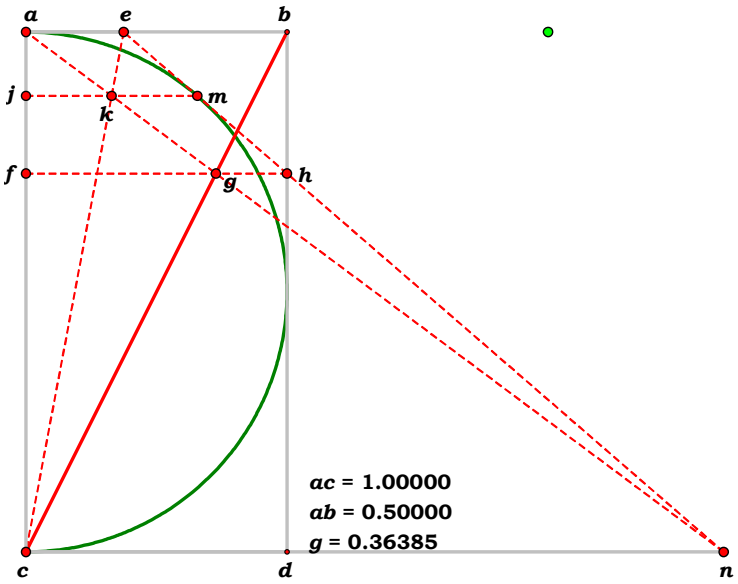
Curve of the Equation



$$\frac{2 \cdot g \cdot (1 - 2 \cdot g)}{8 \cdot g^2 - 4 \cdot g + 1} - jm = 0.00000$$

$$\frac{2 \cdot g - 4 \cdot g^2}{8 \cdot g^2 - 4 \cdot g + 1} - jm = 0.00000$$

Curve of the Equation



$\frac{2\cdot g\cdot(1-2\cdot g)}{8\cdot g^2-4\cdot g+1} - jm = 0.00000$

$\frac{2\cdot g-4\cdot g^2}{8\cdot g^2-4\cdot g+1} - jm = 0.00000$

Given:

$ac := 1 \quad fg := .36385$

Descriptions:

$ab := \frac{ac}{2} \quad fc := 2\cdot fg \quad af := ac - fc$

$cn := \frac{fg}{1-fc} \quad dn := ab - cn \quad dh := fc$

$bh := af \quad be := \frac{dn\cdot bh}{dh} \quad ae := ab + be$

$jk := \frac{ae\cdot cn}{ae+cn} \quad aj := \frac{ac\cdot jk}{cn} \quad cj := ac - aj$

$jm := 2\cdot jk \quad jm - \sqrt{aj\cdot cj} = 0$

Definitions:

$ab - \frac{ac}{2} = 0 \quad fc - 2\cdot fg = 0$

$af - (ac - 2\cdot fg) = 0 \quad cn - \frac{fg}{1-2\cdot fg} = 0 \quad dn - \frac{fg - ab + 2\cdot ab\cdot fg}{2\cdot fg - 1} = 0$

$dh - 2\cdot fg = 0 \quad bh - (ac - 2\cdot fg) = 0 \quad be - \frac{(ac-2\cdot fg)\cdot(fg - ab + 2\cdot ab\cdot fg)}{4\cdot fg^2 - 2\cdot fg} = 0$

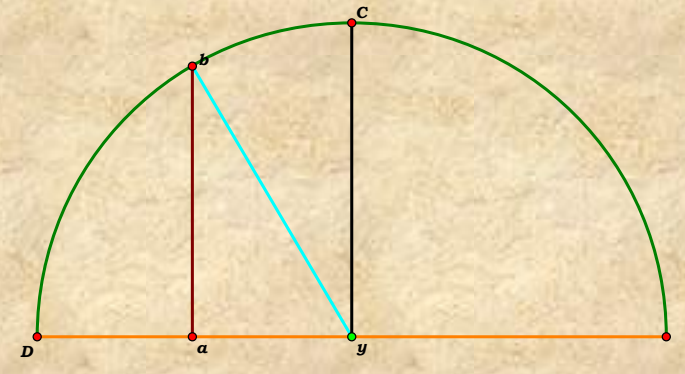
$ae - \left[\frac{ac\cdot fg - ab\cdot ac - 2\cdot fg^2 + 2\cdot ab\cdot ac\cdot fg}{2\cdot fg\cdot(2\cdot fg-1)}\right] = 0 \quad jk - \frac{fg\cdot\left(2\cdot fg^2 + ab\cdot ac - ac\cdot fg - 2\cdot ab\cdot ac\cdot fg\right)}{(2\cdot fg-1)\cdot\left(ac\cdot fg - ab\cdot ac - 4\cdot fg^2 + 2\cdot ab\cdot ac\cdot fg\right)} = 0$

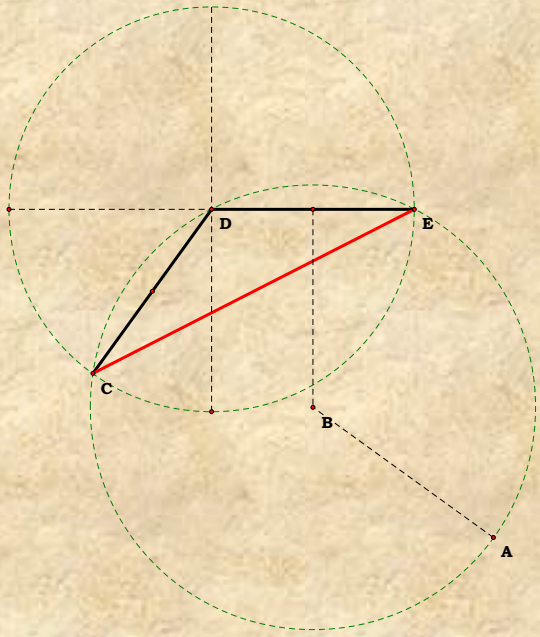
$aj - \frac{ac\cdot\left(ac\cdot fg - ab\cdot ac - 2\cdot fg^2 + 2\cdot ab\cdot ac\cdot fg\right)}{ac\cdot fg - ab\cdot ac - 4\cdot fg^2 + 2\cdot ab\cdot ac\cdot fg} = 0 \quad cj - (ac - aj) = 0$

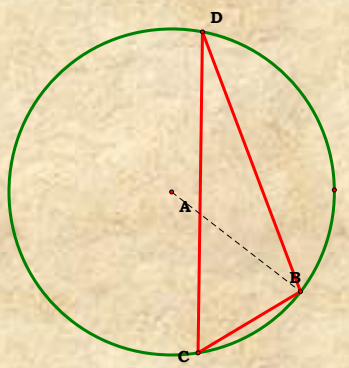
$jm - \frac{2\cdot fg\cdot\left(ac\cdot fg - ab\cdot ac - 2\cdot fg^2 + 2\cdot ab\cdot ac\cdot fg\right)}{(1-2\cdot fg)\cdot\left(ac\cdot fg - ab\cdot ac - 4\cdot fg^2 + 2\cdot ab\cdot ac\cdot fg\right)} = 0 \quad jm - \sqrt{aj\cdot cj} = 0$

$jm - \frac{2\cdot fg\cdot(1-2\cdot fg)}{8\cdot fg^2 - 4\cdot fg + 1} = 0 \quad jm - \frac{2\cdot fg - 4\cdot fg^2}{8\cdot fg^2 - 4\cdot fg + 1} = 0$

The Angle







Demonstrating the obfuscation of Geometry

$Unit = 1.00000$

$x = 0.00000$

$y = 1.00000$

$a = 0.49328$ $\quad 1 - a = 0.50672$ $\quad a - 1 = -0.50672$

$b = 0.86211$ $\quad \sqrt{a \cdot (2 - a)} = 0.86211$ $\quad \sqrt{a \cdot (2 - a)} - b = 0.00000$

$ya = 0.50672$

$m\angle bya = 59.55435°$

$m\angle yba = 30.44565°$

$m\angle aCy = 26.87228°$

$m\angle Dyb = 59.55435°$

$m\angle bya + m\angle yba = 90.00000°$

$\sin^{-1}(b) - m\angle bya = 0.00000°$ $\quad \sin^{-1}(\sqrt{a \cdot (2 - a)}) - m\angle bya = 0.00000°$

$\cos^{-1}(b) - m\angle yba = 0.00000°$ $\quad \cos^{-1}(\sqrt{a \cdot (2 - a)}) - m\angle yba = 0.00000°$

$\cos^{-1}(1 - a) - m\angle Dyb = 0.00000°$

$\tan^{-1}(ya) - m\angle aCy = 0.00000°$

$\sin(m\angle bya) - b = 0.00000$ $\quad \sin(m\angle bya) - \sqrt{a \cdot (2 - a)} = 0.00000$

$\sin(m\angle yba) - ya = 0.00000$

$\cos(m\angle bya) - ya = 0.00000$

$\cos(m\angle yba) - b = 0.00000$ $\quad \cos(m\angle yba) - \sqrt{a \cdot (2 - a)} = 0.00000$

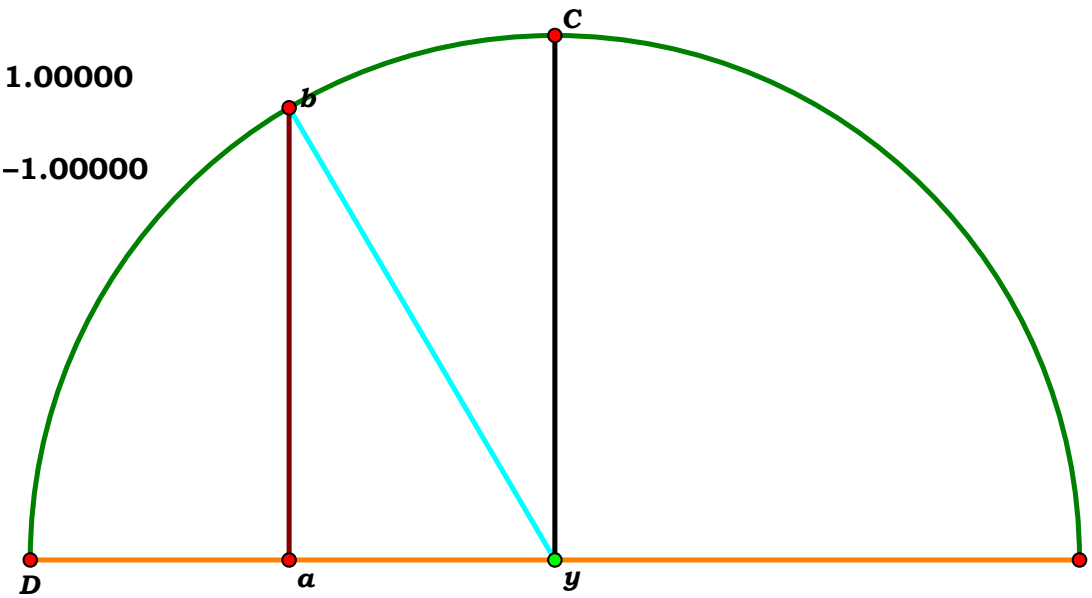
$\tan(m\angle aCy) - ya = 0.00000$

$$\frac{\sin^{-1}(1 - a)}{m\angle yba} = 1.00000$$

$$\frac{\sin^{-1}(a - 1)}{m\angle yba} = -1.00000$$

$$\frac{\tan^{-1}(1 - a)}{m\angle aCy} = 1.00000$$

$$\frac{\tan^{-1}(a - 1)}{m\angle aCy} = -1.00000$$



Trigonometry Functions with, of all things, Trigonometry logical operators, all reduced to a function of a.

AB = 5.90032 cm

DC = 5.37104 cm

DE = 5.37104 cm

CE = 9.56492 cm

2·AB = 11.80064 cm

Animate Point

Move Point

$\frac{DC}{2 \cdot AB} = 0.45515$ $m\angle DEC = 27.07449°$

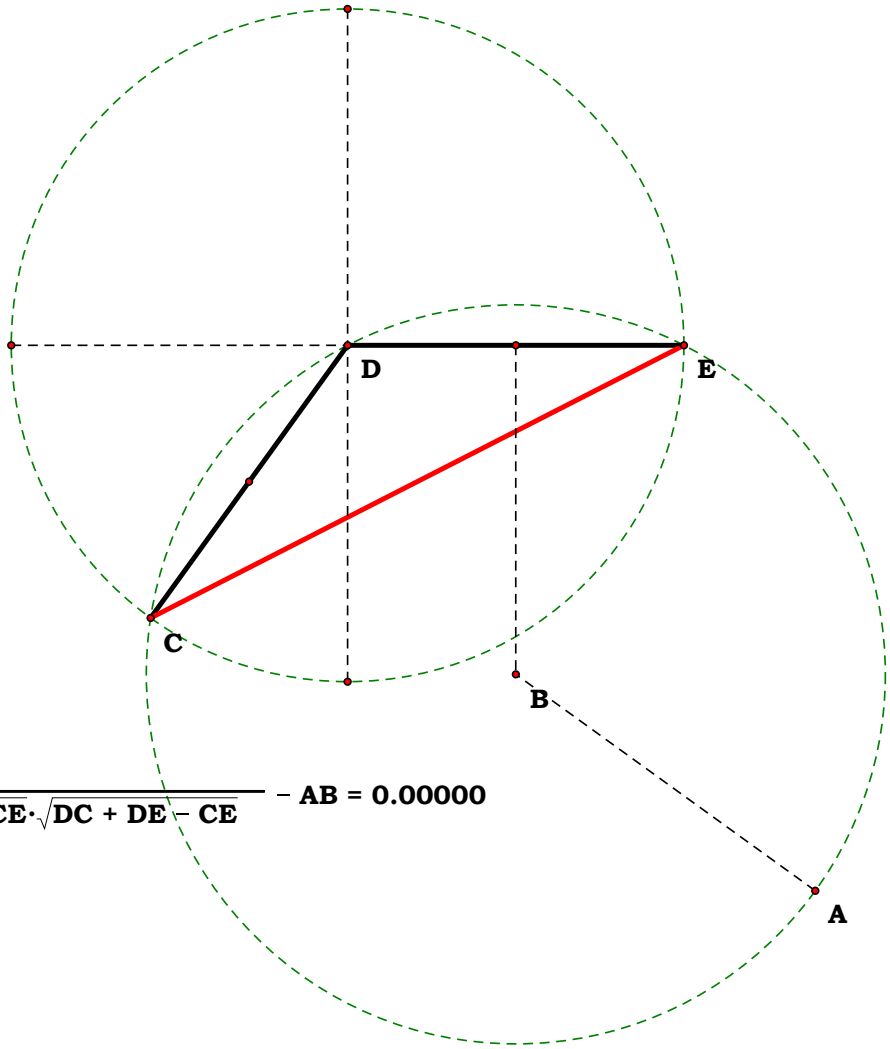
$\frac{DE}{2 \cdot AB} = 0.45515$ $m\angle DCE = 27.07449°$

$\frac{CE}{2 \cdot AB} = 0.81054$ $m\angle CDE = 125.85103°$

$\sin(m\angle DEC) - \frac{DC}{2 \cdot AB} = 0.00000$

$\sin(m\angle DCE) - \frac{DE}{2 \cdot AB} = 0.00000$

$\sin(m\angle CDE) - \frac{CE}{2 \cdot AB} = 0.00000$



$$\frac{DC \cdot DE \cdot CE}{\sqrt{DC + DE + CE} \cdot \sqrt{-DC + DE + CE} \cdot \sqrt{DC - DE + CE} \cdot \sqrt{DC + DE - CE}} - AB = 0.00000$$

$$\frac{DE^2}{\sqrt{2 \cdot DE + CE} \cdot \sqrt{2 \cdot DE - CE}} - AB = 0.00000$$

The Isosceles Triangle

$AB = 4.31303$ cm

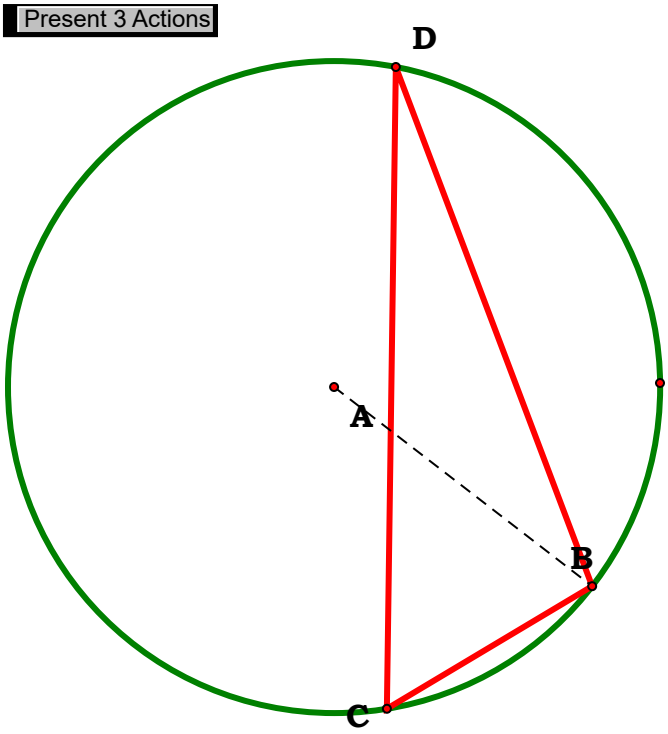
$2 \cdot AB = 8.62607$ cm

$BC = 3.16311$ cm

$CD = 8.49177$ cm

$BD = 7.34429$ cm

Present 3 Actions



$$\frac{BC}{2 \cdot AB} = 0.36669$$

$$\frac{CD}{2 \cdot AB} = 0.98443$$

$$\frac{BD}{2 \cdot AB} = 0.85141$$

$m\angle CBD = 100.12332°$

$m\angle BDC = 21.51173°$

$m\angle DCB = 58.36496°$

$\sin(m\angle BDC) = 0.36669$

$\sin(m\angle CBD) = 0.98443$

$\sin(m\angle DCB) = 0.85141$

$$\frac{BC}{2 \cdot AB} - \sin(m\angle BDC) = 0.00000$$

$$\frac{CD}{2 \cdot AB} - \sin(m\angle CBD) = 0.00000$$

$$\frac{BD}{2 \cdot AB} - \sin(m\angle DCB) = 0.00000$$

$$\frac{BC \cdot CD \cdot BD}{\sqrt{BC + CD + BD} \cdot \sqrt{CD + BD - BC} \cdot \sqrt{BC - CD + BD} \cdot \sqrt{BC + CD - BD}} - AB = 0.00000$$

$$\frac{BC \cdot CD \cdot BD}{\sqrt{BC + CD + BD} \cdot \sqrt{CD + BD - BC} \cdot \sqrt{BC - CD + BD} \cdot \sqrt{BC + CD - BD}} = 4.31303$$

Any Triangle Whatsoever.

Square and Root Deductive

$Unit = 1.00000$

$a = 0.64856$

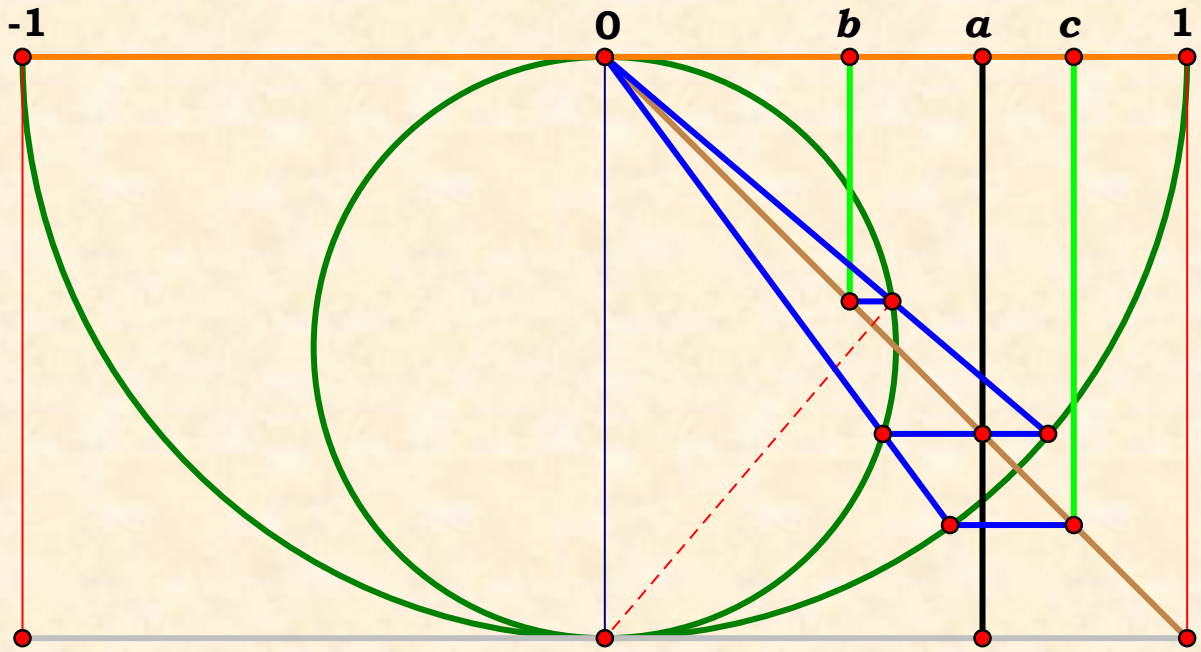
$b = 0.42063$

$c = 0.80533$

$\sqrt{a} - c = 0.00000$

$a^2 - b = 0.00000$

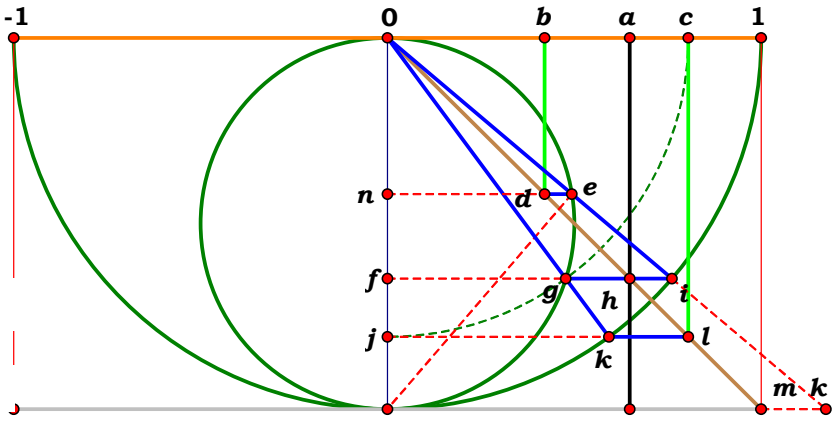
Square and Root



Unit = 1.00000
a = 0.64856
b = 0.42063
c = 0.80533
$\sqrt{a} - c = 0.00000$
$a^2 - b = 0.00000$

e = 0.49366

Root and Power



Square and Root Deductive

$a := .64856 \quad o := 0$

$fo := a \quad fh := a \quad oh := \sqrt{a} \quad io := 1$

$fi := \sqrt{1 - fo^2} \quad fg := \sqrt{fo \cdot (1 - fo)}$

$go := \sqrt{fo^2 + fg^2} \quad c := go \quad c - \sqrt{a} = 0$

$k := \frac{fi}{fo} \quad en := \frac{k}{k^2 + 1} \quad en = 0.49366$

$dn := \frac{en}{k} \quad b := dn$

For this operation, the inductive process used just the diagonal om, but the deductive required a hemisphere to proportion it.

Definitions

$fo - a = 0 \quad fh := a \quad oh - \sqrt{a} = 0 \quad io - 1$

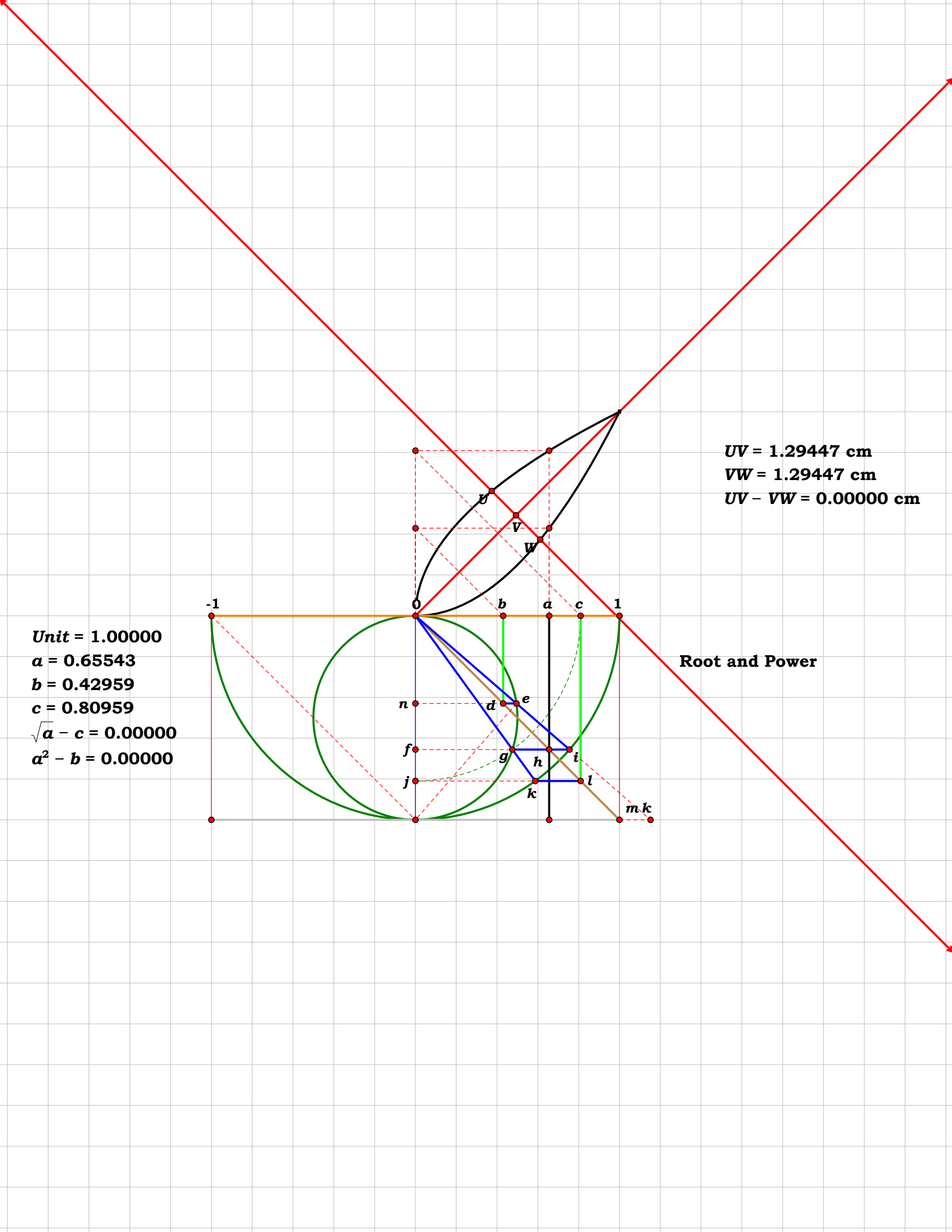
$fi - \sqrt{1 - a^2} = 0 \quad fg - \sqrt{a \cdot (1 - a)} = 0$

$fg - \sqrt{\left(a - a^2\right)} = 0 \quad go - \sqrt{a} = 0 \quad c := go$

$c - \sqrt{a} = 0$

$k - \frac{\sqrt{1 - a^2}}{a} = 0 \quad en - a \cdot \sqrt{1 - a^2} = 0$

$dn - a^2 = 0 \quad b - a^2 = 0$


UV = 1.29447 cm
VW = 1.29447 cm
UV − VW = 0.00000 cm
Unit = 1.00000
a = 0.65543
b = 0.42959
c = 0.80959
√a − c = 0.00000
a² − b = 0.00000
Root and Power
-1
0
b
a
c
1
U
V
W
n
d
e
f
g
h
i
j
k
l
m k

$Unit = 1.00000$

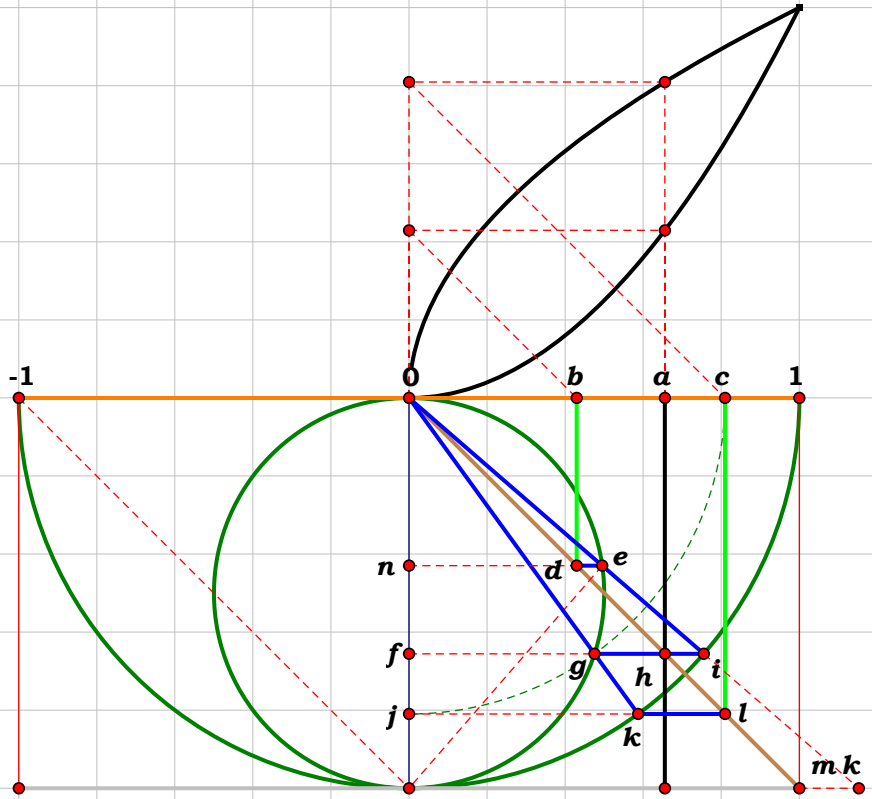
$a = 0.65543$

$b = 0.42959$

$c = 0.80959$

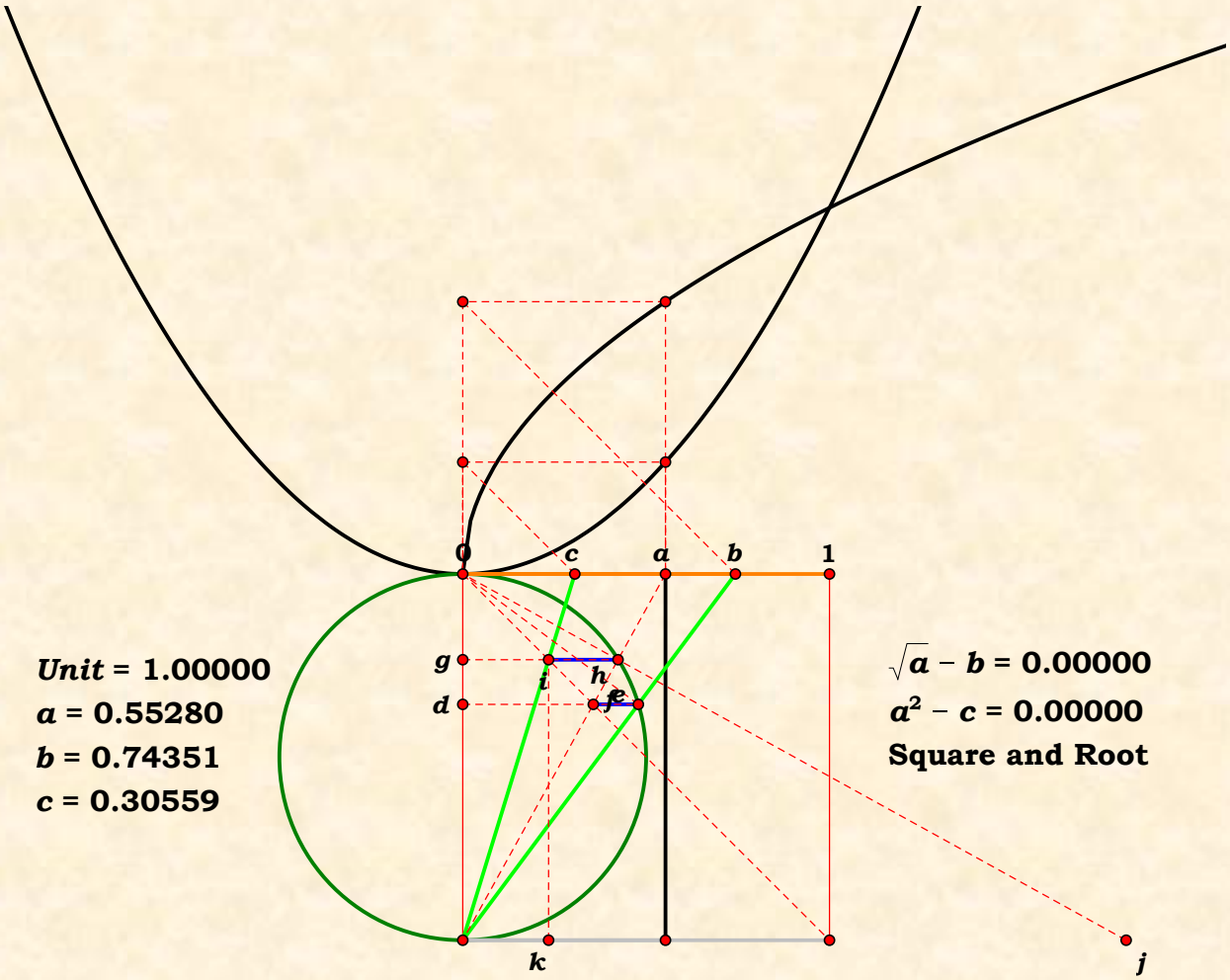
$\sqrt{a} - c = 0.00000$

$a^2 - b = 0.00000$



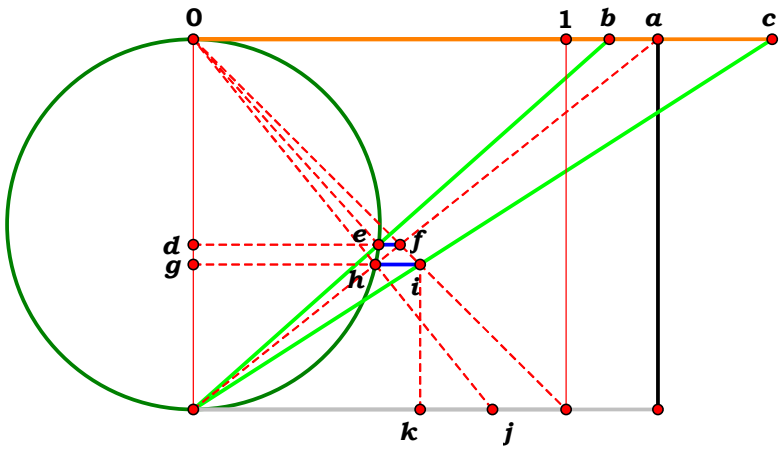
Root and Power

Square and Root Inductive



Unit = 1.00000
a = 1.24638
b = 1.11641
c = 1.55346

$\sqrt{a} - b = 0.00000$
$a^2 - c = 0.00000$
Square and Root



Square and Root Inductive

$a := 1.24638$

$d := 1 - \frac{1}{a+1}$ $\quad e := \sqrt{d \cdot (1-d)}$

$b := \frac{d}{e}$ $\quad j := \frac{1}{a}$ $\quad g := \frac{a}{a+j}$

$ik := 1 - g$ $\quad c := \frac{g}{ik}$ $\quad c = 1.55346$

Definitions

$d - \frac{a}{a+1} = 0$ $\quad e - \frac{\sqrt{a}}{\sqrt{(a+1)^2}} = 0$

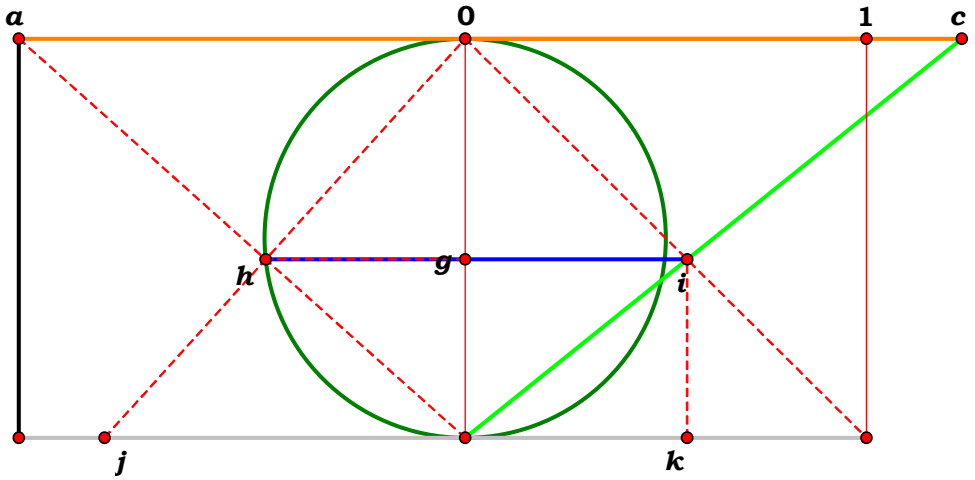
$b - \sqrt{a} = 0$ $\quad j - \frac{1}{a} = 0$

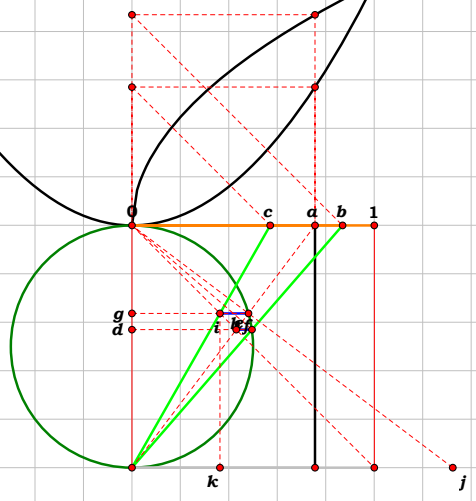
$g - \frac{a^2}{a^2+1} = 0$ $\quad ik - \frac{1}{a^2+1} = 0$ $\quad c - a^2 = 0$

Unit = 1.00000
a = –1.11247

$a^2 - c = 0.00000$
Square and Root

c = 1.23759





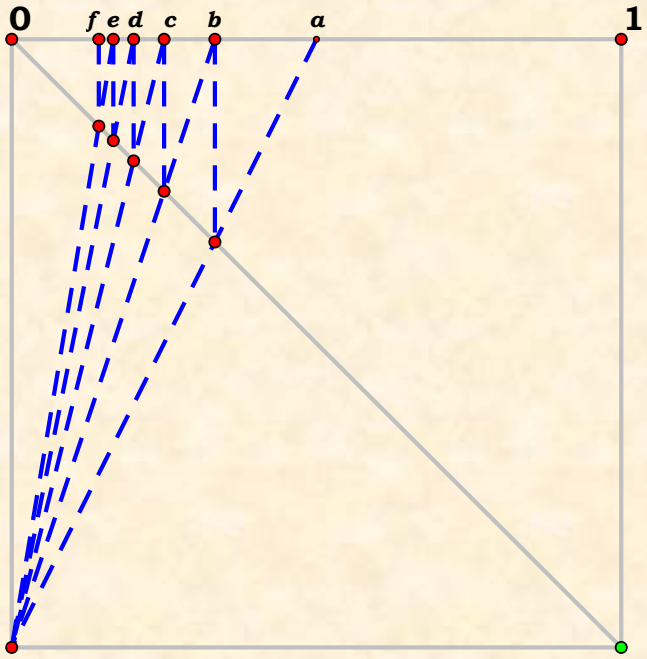
Unit **= 1.00000**
a **= 0.75538**
b **= 0.86913**
c **= 0.57060**

$\sqrt{a} - b = 0.00000$
$a^2 - c = 0.00000$
Square and Root

Arithmetic Series

Unit = 1.00000
1 = 1.00000
0 = 0.00000
a = 0.50000
b = 0.33333
c = 0.25000
d = 0.20000
e = 0.16667
f = 0.14286

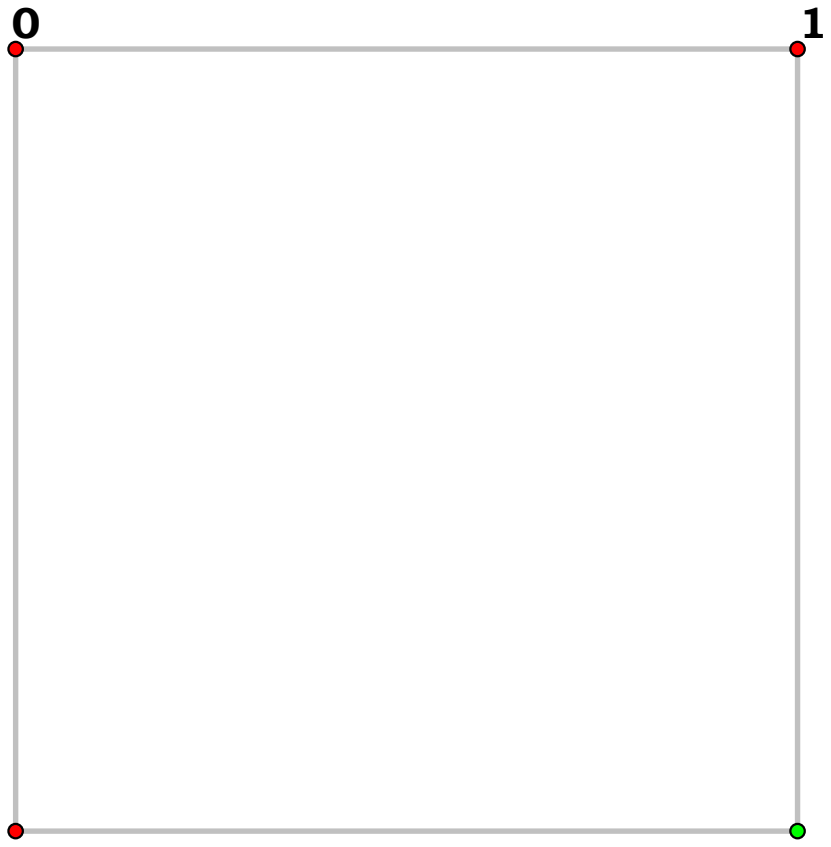
$\frac{1}{2}$ = 0.50000
$\frac{1}{3}$ = 0.33333
$\frac{1}{4}$ = 0.25000
$\frac{1}{5}$ = 0.20000
$\frac{1}{6}$ = 0.16667
$\frac{1}{7}$ = 0.14286



Unit **= 1.00000**

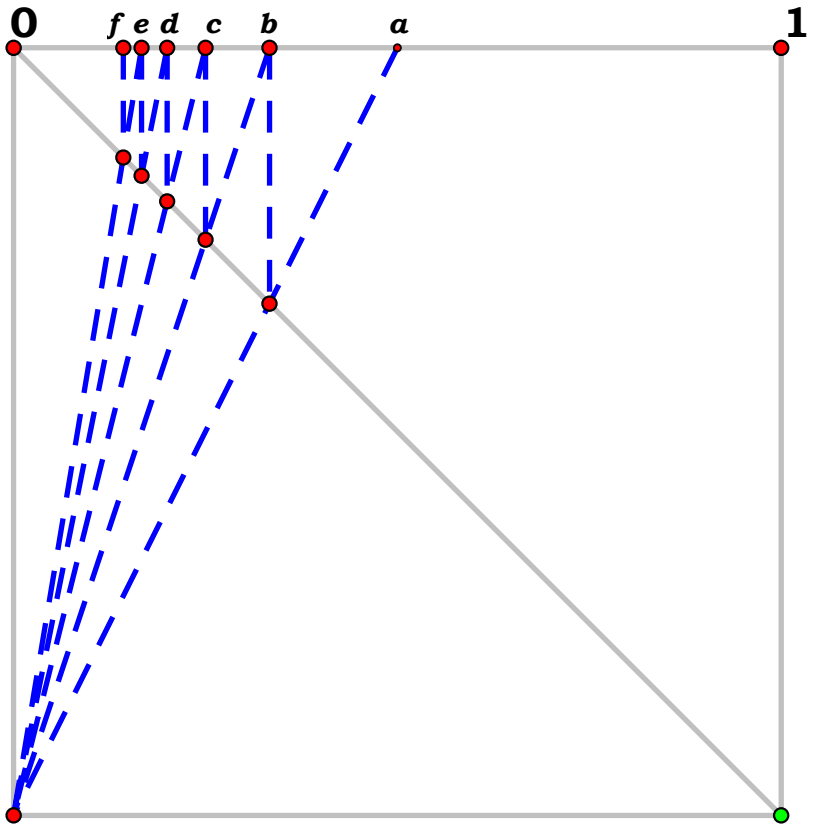
1 = 1.00000

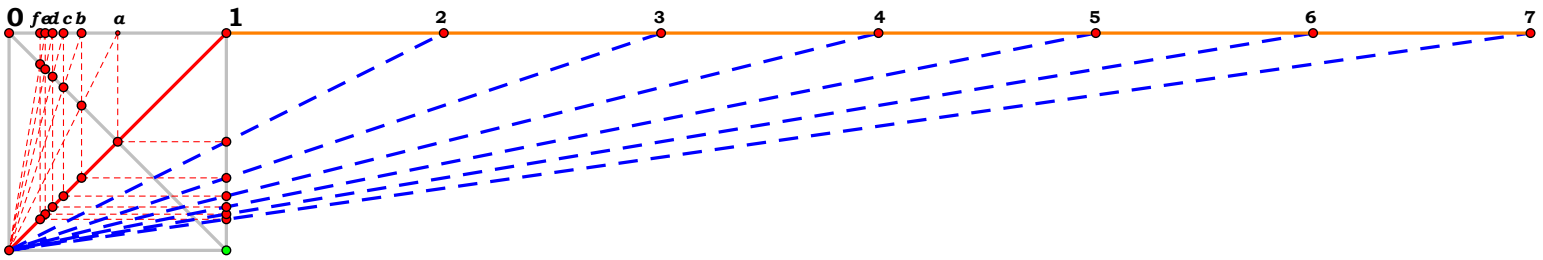
0 = 0.00000



Unit = 1.00000
1 = 1.00000
0 = 0.00000
a = 0.50000
b = 0.33333
c = 0.25000
d = 0.20000
e = 0.16667
f = 0.14286

$\frac{1}{2}$ = 0.50000
$\frac{1}{3}$ = 0.33333
$\frac{1}{4}$ = 0.25000
$\frac{1}{5}$ = 0.20000
$\frac{1}{6}$ = 0.16667
$\frac{1}{7}$ = 0.14286





Unit = 1.00000

1 = 1.00000
0 = 0.00000
a = 0.50000
b = 0.33333
c = 0.25000
d = 0.20000
e = 0.16667
f = 0.14286

$\frac{1}{2}$ = 0.50000 $\frac{1}{5}$ = 0.20000

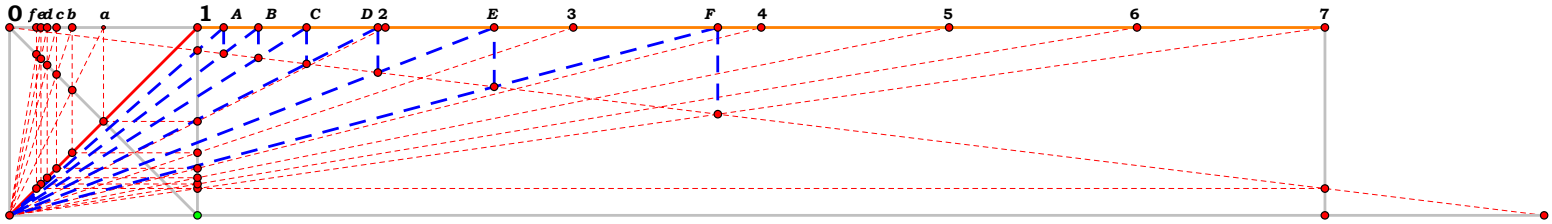
$\frac{1}{3}$ = 0.33333 $\frac{1}{6}$ = 0.16667

$\frac{1}{4}$ = 0.25000 $\frac{1}{7}$ = 0.14286

$\frac{7^2}{7^2-6} = 1.13953$ $\frac{7^2}{7^2-4\cdot6} = 1.96000$

$\frac{7^2}{7^2-2\cdot6} = 1.32432$ $\frac{7^2}{7^2-5\cdot6} = 2.57895$

$\frac{7^2}{7^2-3\cdot6} = 1.58065$ $\frac{7^2}{7^2-6\cdot6} = 3.76923$



Unit = 1.00000

1 = 1.00000
0 = 0.00000
a = 0.50000
b = 0.33333
c = 0.25000
d = 0.20000
e = 0.16667
f = 0.14286

$\frac{1}{2} = 0.50000$ $\frac{1}{5} = 0.20000$ $\frac{49}{43} = 1.13953$ *A* = 1.13953 $\frac{49}{25} = 1.96000$ *D* = 1.96000

$\frac{1}{3} = 0.33333$ $\frac{1}{6} = 0.16667$ $\frac{49}{37} = 1.32432$ *B* = 1.32432 $\frac{49}{19} = 2.57895$ *E* = 2.57895

$\frac{1}{4} = 0.25000$ $\frac{1}{7} = 0.14286$ $\frac{49}{31} = 1.58065$ *C* = 1.58065 $\frac{49}{13} = 3.76923$ *F* = 3.76923

$\frac{G \cdot 7}{(G \cdot 7) - (G - 1)} - A = 0.00000$

$\frac{G \cdot 7}{(G \cdot 7) - 2 \cdot (G - 1)} - B = 0.00000$

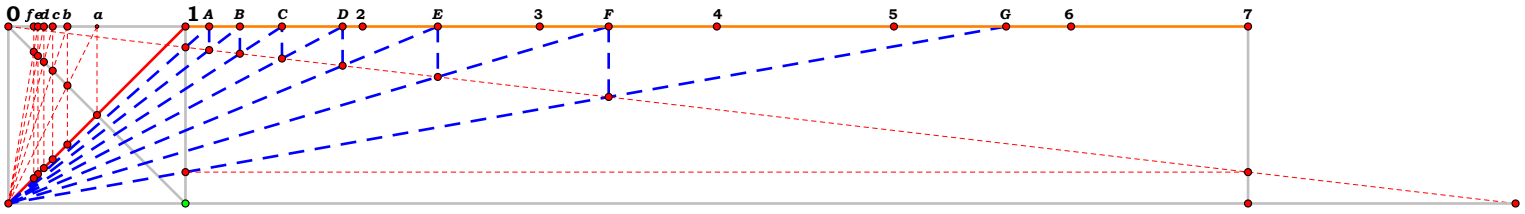
$\frac{G \cdot 7}{(G \cdot 7) - 3 \cdot (G - 1)} - C = 0.00000$

$\frac{G \cdot 7}{(G \cdot 7) - 4 \cdot (G - 1)} - D = 0.00000$

$\frac{G \cdot 7}{(G \cdot 7) - 5 \cdot (G - 1)} - E = 0.00000$

$\frac{G \cdot 7}{(G \cdot 7) - 6 \cdot (G - 1)} - F = 0.00000$

$\frac{G \cdot 7}{(G \cdot 7) - 7 \cdot (G - 1)} - G = 0.00000$



$Unit = 1.00000$

$1 = 1.00000$

$0 = 0.00000$

$a = 0.50000$

$b = 0.33333$

$c = 0.25000$

$d = 0.20000$

$e = 0.16667$

$f = 0.14286$

$\frac{1}{2} = 0.50000$

$\frac{1}{3} = 0.33333$

$\frac{1}{4} = 0.25000$

$\frac{1}{5} = 0.20000$

$\frac{1}{6} = 0.16667$

$\frac{1}{7} = 0.14286$

$A = 1.13314$

$B = 1.30719$

$C = 1.54440$

$D = 1.88678$

$E = 2.42422$

$F = 3.38977$

$G = 5.63362$

$G \cdot 7 = 39.43532$

$(G - 1) = 4.63362$

$G = 0.57589$
$F = 0.70219$
$E = 0.77053$
$D = 0.81336$
$C = 0.84271$
$B = 0.86409$
$A = 0.88035$

$\frac{7}{13} - G = -0.03743$
$\frac{13}{19} - F = -0.01798$
$\frac{19}{25} - E = -0.01053$
$\frac{25}{31} - D = -0.00691$
$\frac{31}{37} - C = -0.00488$
$\frac{37}{43} - B = -0.00363$
$\frac{43}{49} - A = -0.00280$

$\frac{7}{12} - G = 0.00744$
$\frac{12}{17} - F = 0.00369$
$\frac{17}{22} - E = 0.00220$
$\frac{22}{27} - D = 0.00146$
$\frac{27}{32} - C = 0.00104$
$\frac{32}{37} - B = 0.00077$
$\frac{37}{42} - A = 0.00060$

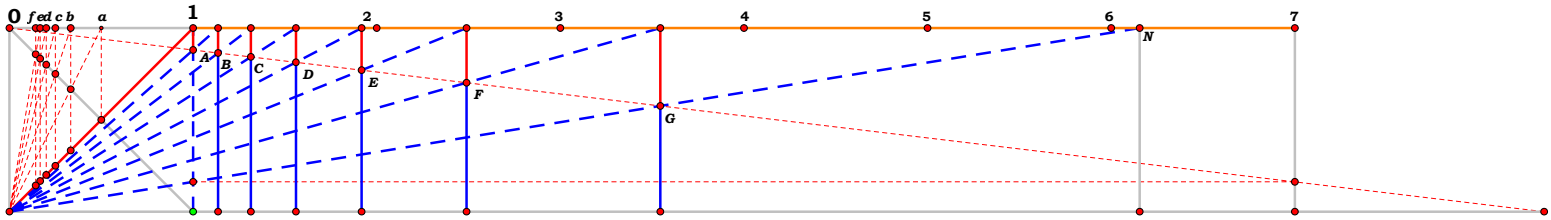
$\frac{7}{11} - G = 0.06047$
$\frac{11}{15} - F = 0.03114$
$\frac{15}{19} - E = 0.01894$
$\frac{19}{23} - D = 0.01273$
$\frac{23}{27} - C = 0.00914$
$\frac{27}{31} - B = 0.00688$
$\frac{31}{35} - A = 0.00536$

$\frac{7}{10} - G = 0.12411$
$\frac{10}{13} - F = 0.06704$
$\frac{13}{16} - E = 0.04197$
$\frac{16}{19} - D = 0.02875$
$\frac{19}{22} - C = 0.02092$
$\frac{22}{25} - B = 0.01591$
$\frac{25}{28} - A = 0.01250$

$\frac{7}{9} - G = 0.20189$
$\frac{9}{11} - F = 0.11599$
$\frac{11}{13} - E = 0.07562$
$\frac{13}{15} - D = 0.05331$
$\frac{15}{17} - C = 0.03964$
$\frac{17}{19} - B = 0.03065$
$\frac{19}{21} - A = 0.02441$

$\frac{7}{8} - G = 0.29911$
$\frac{8}{9} - F = 0.18670$
$\frac{9}{10} - E = 0.12947$
$\frac{10}{11} - D = 0.09573$
$\frac{11}{12} - C = 0.07395$
$\frac{12}{13} = 0.92308$
$\frac{13}{14} - A = 0.04822$

$\frac{7 + 0\cdot(N-1)}{7 + N - 1} - G = 0.00000$
$\frac{7 + N - 1}{7 + 2\cdot(N-1)} - F = 0.00000$
$\frac{7 + 2\cdot(N-1)}{7 + 3\cdot(N-1)} - E = 0.00000$
$\frac{7 + 3\cdot(N-1)}{7 + 4\cdot(N-1)} - D = 0.00000$
$\frac{7 + 4\cdot(N-1)}{7 + 5\cdot(N-1)} - C = 0.00000$
$\frac{7 + 5\cdot(N-1)}{7 + 6\cdot(N-1)} - B = 0.00000$
$\frac{7 + 6\cdot(N-1)}{7 + 7\cdot(N-1)} - A = 0.00000$



$Unit = 1.00000$
$1 = 1.00000$
$0 = 0.00000$
$a = 0.50000$
$b = 0.33333$
$c = 0.25000$
$d = 0.20000$
$e = 0.16667$
$f = 0.14286$

$\frac{1}{2} = 0.50000$
$\frac{1}{3} = 0.33333$
$\frac{1}{4} = 0.25000$
$\frac{1}{5} = 0.20000$
$\frac{1}{6} = 0.16667$
$\frac{1}{7} = 0.14286$

$N = 6.15508$

$(7 + 0\cdot(N-1)) = 7.00000$
$(7 + N - 1) = 12.15508$
$(7 + 2\cdot(N-1)) = 17.31016$
$7 + 3\cdot(N-1) = 22.46523$
$7 + 4\cdot(N-1) = 27.62031$
$7 + 5\cdot(N-1) = 32.77539$
$7 + 6\cdot(N-1) = 37.93047$
$7 + 7\cdot(N-1) = 43.08555$

$Unit = 1.00000$

$1 = 1.00000$

$0 = 0.00000$

$a = 0.66667$

$b = 0.40000$

$c = 0.28571$

$d = 0.22222$

$e = 0.18182$

$f = 0.15385$

$g = 0.13333$

$h = 0.11765$

$\frac{2}{3} = 0.66667$

$\frac{2}{5} = 0.40000$

$\frac{2}{7} = 0.28571$

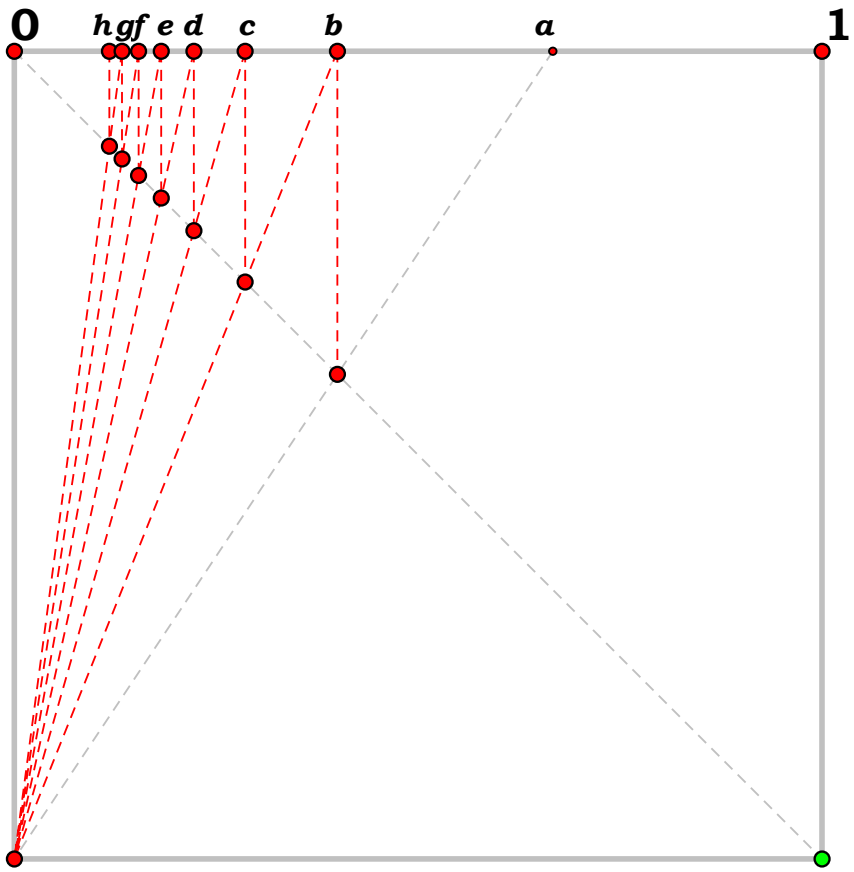
$\frac{2}{9} = 0.22222$

$\frac{2}{11} = 0.18182$

$\frac{2}{13} = 0.15385$

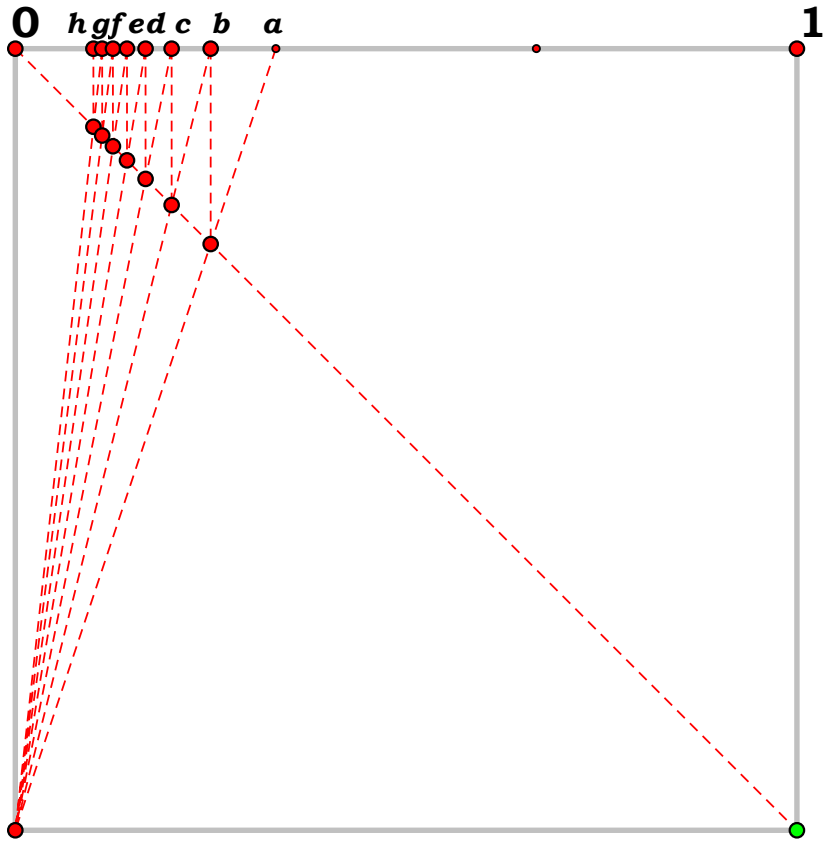
$\frac{2}{15} = 0.13333$

$\frac{2}{17} = 0.11765$



Unit = 1.00000
1 = 1.00000
0 = 0.00000
a = 0.33333
b = 0.25000
c = 0.20000
d = 0.16667
e = 0.14286
f = 0.12500
g = 0.11111
h = 0.10000

$\frac{1}{3}$ = 0.33333
$\frac{1}{4}$ = 0.25000
$\frac{1}{5}$ = 0.20000
$\frac{1}{6}$ = 0.16667
$\frac{1}{7}$ = 0.14286
$\frac{1}{8}$ = 0.12500
$\frac{1}{9}$ = 0.11111
$\frac{1}{10}$ = 0.10000



$Unit = 1.00000$

$1 = 1.00000$

$0 = 0.00000$

$a = 0.80000$

$b = 0.44444$

$c = 0.30769$

$d = 0.23529$

$e = 0.19048$

$f = 0.16000$

$g = 0.13793$

$h = 0.12121$

$\frac{4}{5} = 0.80000$

$\frac{4}{9} = 0.44444$

$\frac{4}{13} = 0.30769$

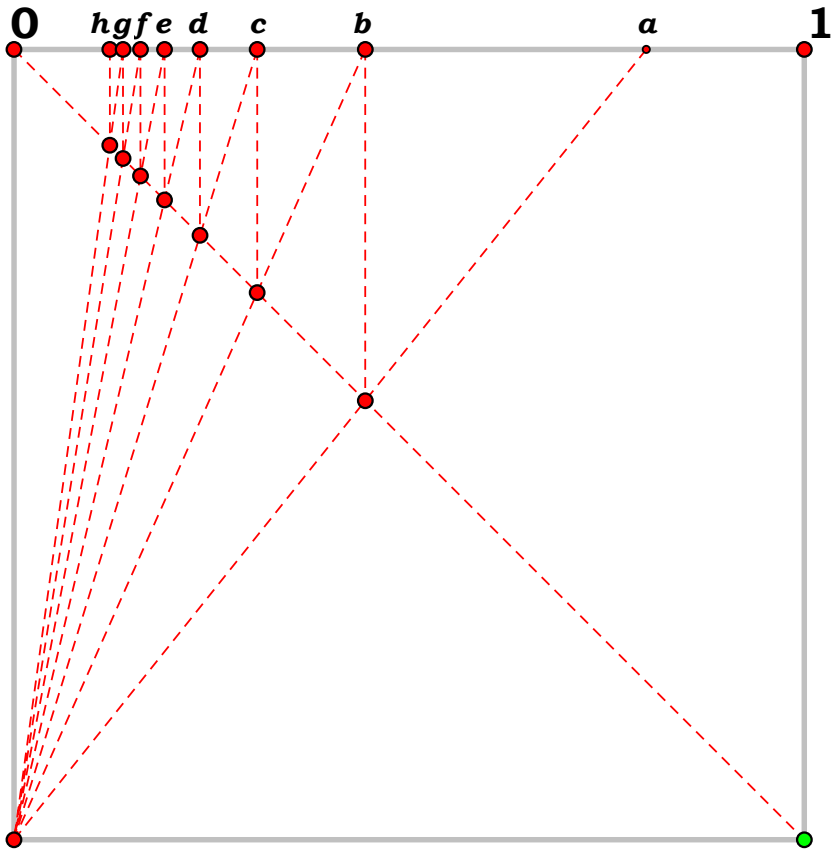
$\frac{4}{17} = 0.23529$

$\frac{4}{21} = 0.19048$

$\frac{4}{25} = 0.16000$

$\frac{4}{29} = 0.13793$

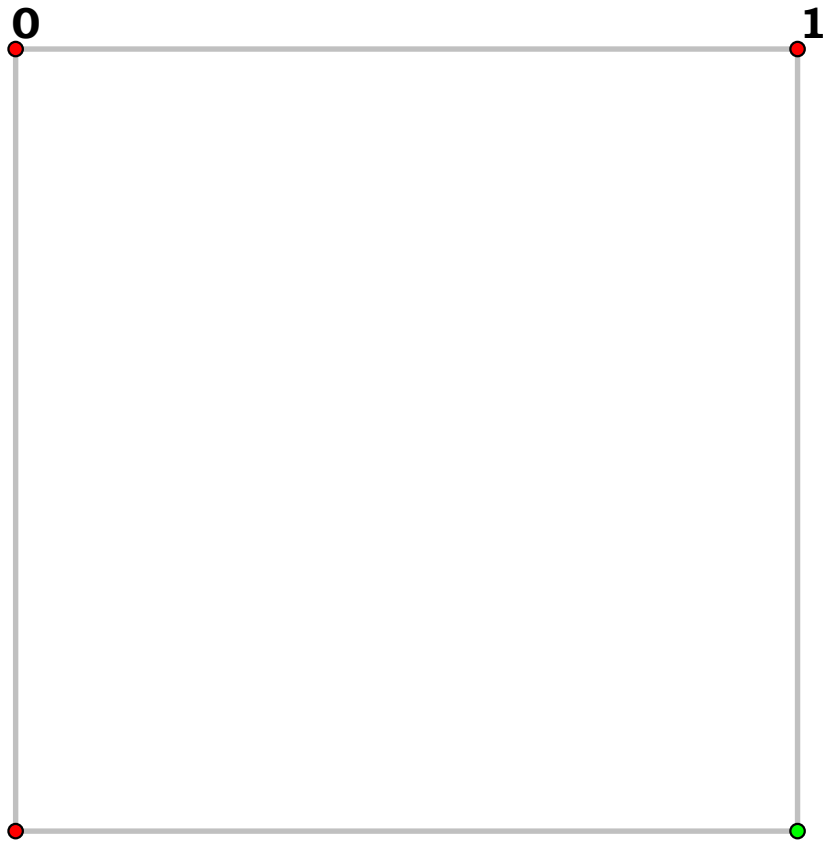
$\frac{4}{33} = 0.12121$



Unit **= 1.00000**

1 = 1.00000

0 = 0.00000



$Unit = 1.00000$

$1 = 1.00000$

$0 = 0.00000$

$a = 0.50000$

$b = 0.42857$

$c = 0.37500$

$d = 0.33333$

$e = 0.30000$

$f = 0.27273$

$g = 0.25000$

$h = 0.23077$

$\frac{3}{6} = 0.50000$

$\frac{3}{7} = 0.42857$

$\frac{3}{8} = 0.37500$

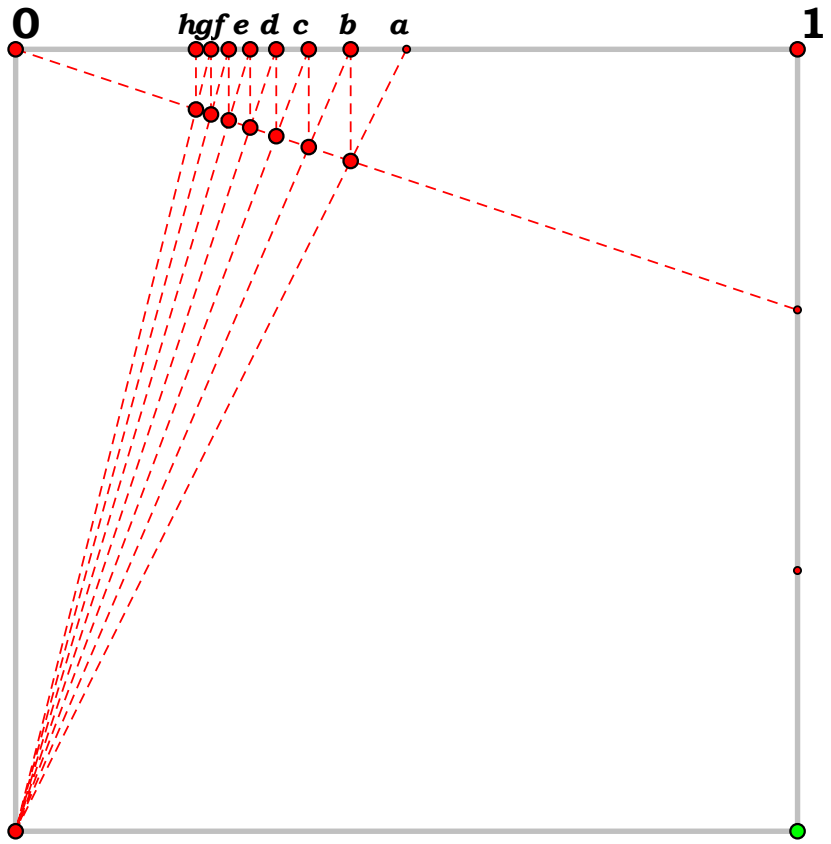
$\frac{3}{9} = 0.33333$

$\frac{3}{10} = 0.30000$

$\frac{3}{11} = 0.27273$

$\frac{3}{12} = 0.25000$

$\frac{3}{13} = 0.23077$



Move Unit Point

Show Base Line Points (20)

X1

X2

X3

X4

X5

X6

X7

X8

X9

X10

X11

X12

X13

X14

X15

X16

X17

X18

X19

X20

$13 \cdot N_1 = 42.46040$

$N_1 - 1 = 2.26618$

$\frac{13 \cdot N_1}{(13 \cdot N_1) - (N_1 - 1)} - A = 0.00000$

$\frac{13 \cdot N_1}{(13 \cdot N_1) - 2 \cdot (N_1 - 1)} - B = 0.00000$

$\frac{13 \cdot N_1}{(13 \cdot N_1) - 3 \cdot (N_1 - 1)} - C = 0.00000$

$\frac{13 \cdot N_1}{(13 \cdot N_1) - 4 \cdot (N_1 - 1)} - D = 0.00000$

$\frac{13 \cdot N_1}{(13 \cdot N_1) - 5 \cdot (N_1 - 1)} - E = 0.00000$

$\frac{13 \cdot N_1}{(13 \cdot N_1) - 6 \cdot (N_1 - 1)} - F = 0.00000$

$\frac{13 \cdot N_1}{(13 \cdot N_1) - 7 \cdot (N_1 - 1)} - G = 0.00000$

$\frac{13 \cdot N_1}{(13 \cdot N_1) - 8 \cdot (N_1 - 1)} - H = 0.00000$

$\frac{13 \cdot N_1}{(13 \cdot N_1) - 9 \cdot (N_1 - 1)} - I = 0.00000$

$\frac{13 \cdot N_1}{(13 \cdot N_1) - 10 \cdot (N_1 - 1)} - J = 0.00000$

$\frac{13 \cdot N_1}{(13 \cdot N_1) - 11 \cdot (N_1 - 1)} - K = 0.00000$

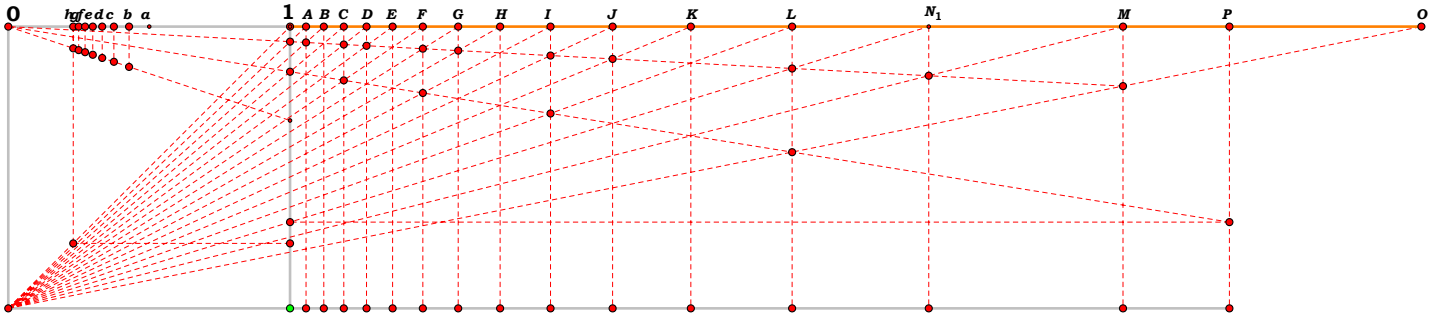
$\frac{13 \cdot N_1}{(13 \cdot N_1) - 12 \cdot (N_1 - 1)} - L = 0.00000$

$\frac{13 \cdot N_1}{(13 \cdot N_1) - 13 \cdot (N_1 - 1)} - N_1 = 0.00000$

$\frac{13 \cdot N_1}{(13 \cdot N_1) - 14 \cdot (N_1 - 1)} - M = 0.00000$

$\frac{13 \cdot N_1}{(13 \cdot N_1) - 15 \cdot (N_1 - 1)} - O = 0.00000$

$\frac{1}{h} - P = 0.00000$



Unit = 1.00000

1 = 1.00000

0 = 0.00000

a = 0.50000

b = 0.42857

c = 0.37500

d = 0.33333

e = 0.30000

f = 0.27273

g = 0.25000

h = 0.23077

$\frac{3}{6} = 0.50000$

$\frac{3}{7} = 0.42857$

$\frac{3}{8} = 0.37500$

$\frac{3}{9} = 0.33333$

$\frac{3}{10} = 0.30000$

$\frac{3}{11} = 0.27273$

$\frac{3}{12} = 0.25000$

$\frac{3}{13} = 0.23077$

A = 1.05638

B = 1.11950

C = 1.19064

D = 1.27143

E = 1.36399

F = 1.47109

G = 1.59643

H = 1.74512

I = 1.92436

J = 2.14462

K = 2.42183

L = 2.78134

N_1 = 3.26618

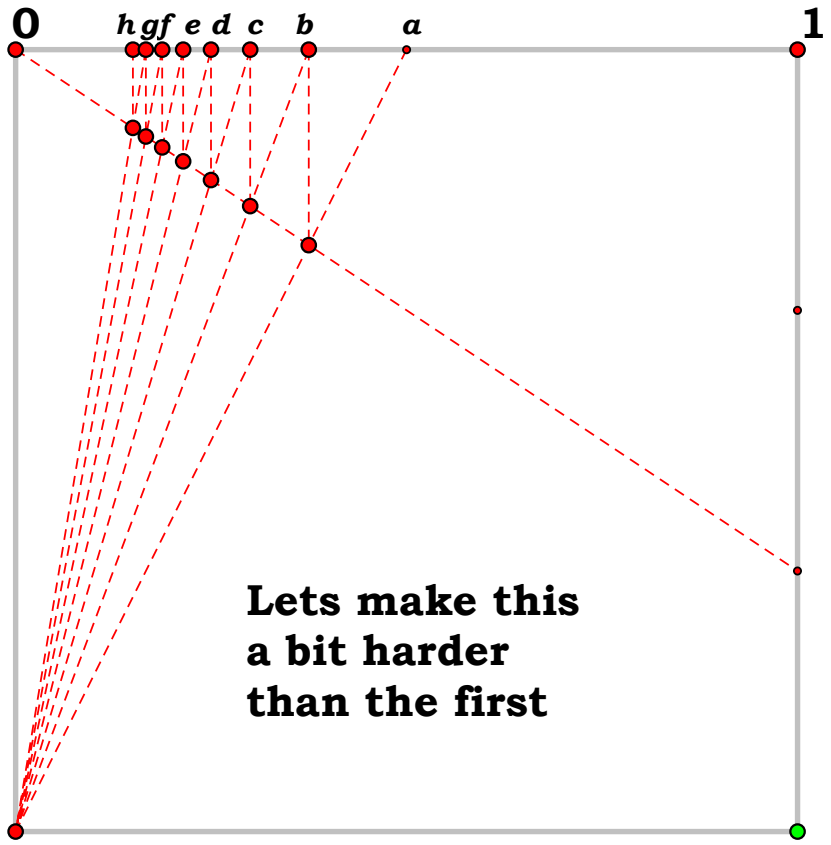
M = 3.95576

O = 5.01444

P = 4.33333

Unit = 1.00000
1 = 1.00000
0 = 0.00000
a = 0.50000
b = 0.37500
c = 0.30000
d = 0.25000
e = 0.21429
f = 0.18750
g = 0.16667
h = 0.15000

$\frac{3}{6}$ = 0.50000
$\frac{3}{8}$ = 0.37500
$\frac{3}{10}$ = 0.30000
$\frac{3}{12}$ = 0.25000
$\frac{3}{14}$ = 0.21429
$\frac{3}{16}$ = 0.18750
$\frac{3}{18}$ = 0.16667
$\frac{3}{20}$ = 0.15000



Unit = 1.00000

1 = 1.00000

0 = 0.00000

a = 0.33333

b = 0.27273

c = 0.23077

d = 0.20000

e = 0.17647

f = 0.15789

g = 0.14286

h = 0.13043

$\frac{3}{9} - a = 0.00000$

$\frac{3}{11} - b = 0.00000$

$\frac{3}{13} - c = 0.00000$

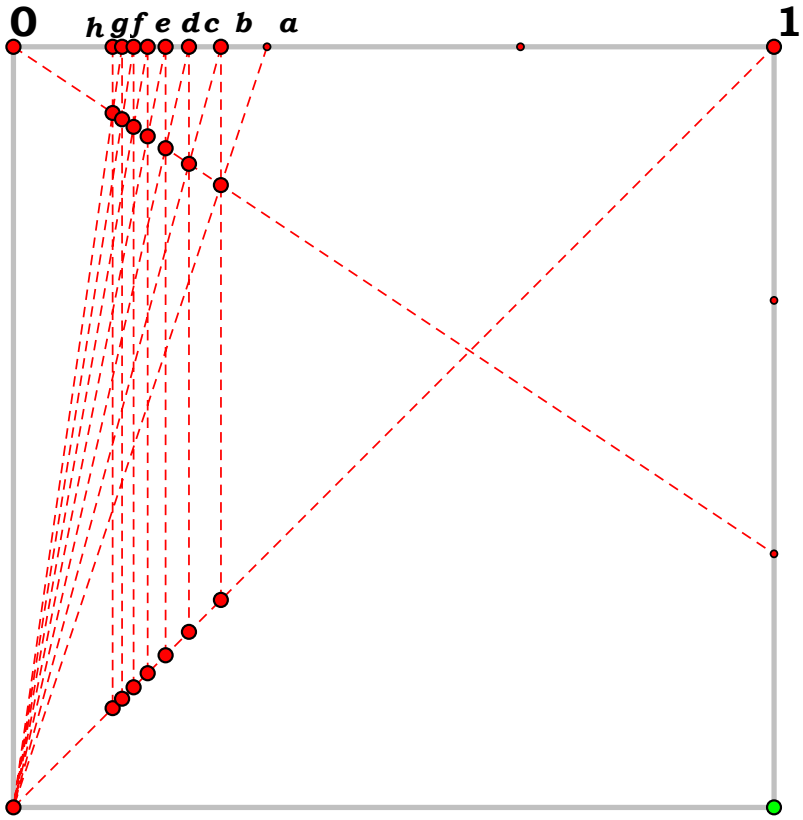
$\frac{3}{15} - d = 0.00000$

$\frac{3}{17} - e = 0.00000$

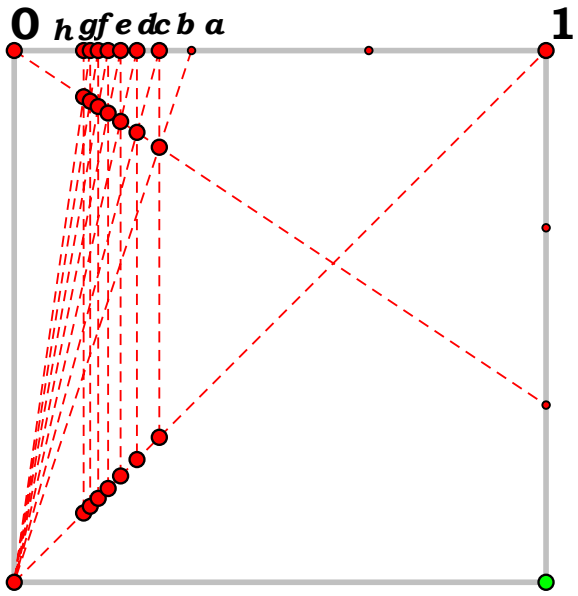
$\frac{3}{19} - f = 0.00000$

$\frac{3}{21} - g = 0.00000$

$\frac{3}{23} - h = 0.00000$



Now we have it. By standardizing one's placement, one can make this figure do some very complicated functions. Unlike the fake Cartesian geometry, I work in the box.



$Unit = 1.00000$

$1 = 1.00000$ $d = 0.20000$

$0 = 0.00000$ $e = 0.17647$

$a = 0.33333$ $f = 0.15789$

$b = 0.27273$ $g = 0.14286$

$c = 0.23077$ $h = 0.13043$

$\frac{3}{9} - a = 0.00000$ $\frac{3}{17} - e = 0.00000$

$\frac{3}{11} - b = 0.00000$ $\frac{3}{19} - f = 0.00000$

$\frac{3}{13} - c = 0.00000$ $\frac{3}{21} - g = 0.00000$

$\frac{3}{15} - d = 0.00000$ $\frac{3}{23} - h = 0.00000$

Move Unit Point

Show Base Line Points (20)

X1 X2 X3 X4 X5 X6 X7 X8 X9 X10 X11 X12 X13 X14 X15 X16 X17 X18 X19 X20

$N_1 \cdot 11 = 44.41906$

$N_1 - 1 = 3.03810$

$\frac{N_1 \cdot 11}{(N_1 \cdot 11) - (N_1 - 1)} - A = 0.00000$

$\frac{N_1 \cdot 11}{(N_1 \cdot 11) - 2 \cdot (N_1 - 1)} - B = 0.00000$

$\frac{N_1 \cdot 11}{(N_1 \cdot 11) - 3 \cdot (N_1 - 1)} - C = 0.00000$

$\frac{N_1 \cdot 11}{(N_1 \cdot 11) - 4 \cdot (N_1 - 1)} - D = 0.00000$

$\frac{N_1 \cdot 11}{(N_1 \cdot 11) - 5 \cdot (N_1 - 1)} - E = 0.00000$

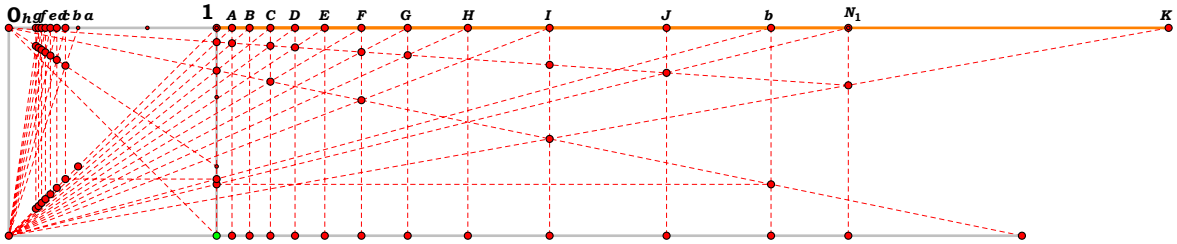
$\frac{N_1 \cdot 11}{(N_1 \cdot 11) - 6 \cdot (N_1 - 1)} - F = 0.00000$

$\frac{N_1 \cdot 11}{(N_1 \cdot 11) - 7 \cdot (N_1 - 1)} - G = 0.00000$

$\frac{N_1 \cdot 11}{(N_1 \cdot 11) - 8 \cdot (N_1 - 1)} - H = 0.00000$

$\frac{N_1 \cdot 11}{(N_1 \cdot 11) - 9 \cdot (N_1 - 1)} - I = 0.00000$

$\frac{N_1 \cdot 11}{(N_1 \cdot 11) - 10 \cdot (N_1 - 1)} - J = 0.00000$



$\frac{3}{9} - a = 0.00000$

$\frac{3}{11} - b = 0.00000$

$\frac{3}{13} - c = 0.00000$

$\frac{3}{15} - d = 0.00000$

$\frac{3}{17} - e = 0.00000$

$\frac{3}{19} - f = 0.00000$

$\frac{3}{21} - g = 0.00000$

$\frac{3}{23} - h = 0.00000$

Unit = 1.00000

1 = 1.00000 $d = 0.20000$

0 = 0.00000 $e = 0.17647$

$a = 0.33333$ $f = 0.15789$

$b = 0.27273$ $g = 0.14286$

$c = 0.23077$ $h = 0.13043$

$N_1 = 4.03810$

$A = 1.07342$ $G = 1.91855$

$B = 1.15847$ $H = 2.20833$

$C = 1.25816$ $I = 2.60123$

$D = 1.37662$ $J = 3.16418$

$E = 1.51971$ $K = 5.57895$

$F = 1.69600$ $x_b = 3.66667$

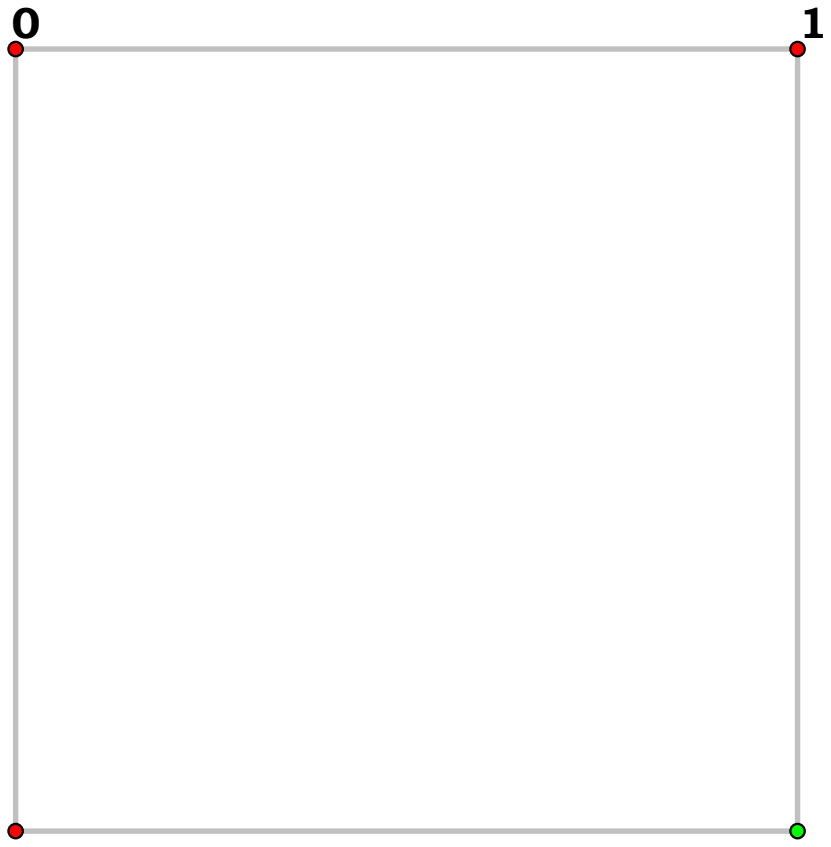
Unlike the first demonstration of the series, this one takes two diagonals because of the fractional excess.

$\frac{N_1 \cdot 11}{(N_1 \cdot 11) - 12 \cdot (N_1 - 1)} - K = 0.00000$

Unit **= 1.00000**

1 = 1.00000

0 = 0.00000



$Unit = 1.00000$

$1 = 1.00000$

$0 = 0.00000$

$a = 0.50000$

$b = 0.42857$

$c = 0.37500$

$d = 0.33333$

$e = 0.30000$

$f = 0.27273$

$g = 0.25000$

$h = 0.23077$

$\frac{3}{6} = 0.50000$

$\frac{3}{7} = 0.42857$

$\frac{3}{8} = 0.37500$

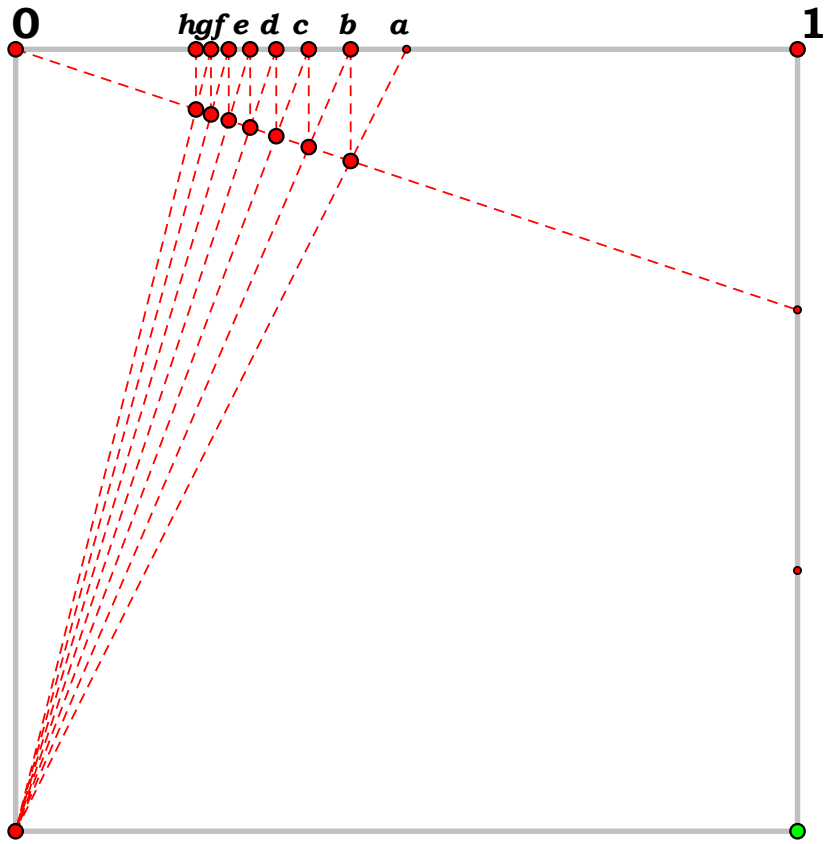
$\frac{3}{9} = 0.33333$

$\frac{3}{10} = 0.30000$

$\frac{3}{11} = 0.27273$

$\frac{3}{12} = 0.25000$

$\frac{3}{13} = 0.23077$



Move Unit Point

Show Base Line Points (20)

X1

X2

X3

X4

X5

X6

X7

X8

X9

X10

X11

X12

X13

X14

X15

X16

X17

X18

X19

X20

$13 \cdot N_1 = 42.46040$

$N_1 - 1 = 2.26618$

$\frac{13 \cdot N_1}{(13 \cdot N_1) - (N_1 - 1)} - A = 0.00000$

$\frac{13 \cdot N_1}{(13 \cdot N_1) - 2 \cdot (N_1 - 1)} - B = 0.00000$

$\frac{13 \cdot N_1}{(13 \cdot N_1) - 3 \cdot (N_1 - 1)} - C = 0.00000$

$\frac{13 \cdot N_1}{(13 \cdot N_1) - 4 \cdot (N_1 - 1)} - D = 0.00000$

$\frac{13 \cdot N_1}{(13 \cdot N_1) - 5 \cdot (N_1 - 1)} - E = 0.00000$

$\frac{13 \cdot N_1}{(13 \cdot N_1) - 6 \cdot (N_1 - 1)} - F = 0.00000$

$\frac{13 \cdot N_1}{(13 \cdot N_1) - 7 \cdot (N_1 - 1)} - G = 0.00000$

$\frac{13 \cdot N_1}{(13 \cdot N_1) - 8 \cdot (N_1 - 1)} - H = 0.00000$

$\frac{13 \cdot N_1}{(13 \cdot N_1) - 9 \cdot (N_1 - 1)} - I = 0.00000$

$\frac{13 \cdot N_1}{(13 \cdot N_1) - 10 \cdot (N_1 - 1)} - J = 0.00000$

$\frac{13 \cdot N_1}{(13 \cdot N_1) - 11 \cdot (N_1 - 1)} - K = 0.00000$

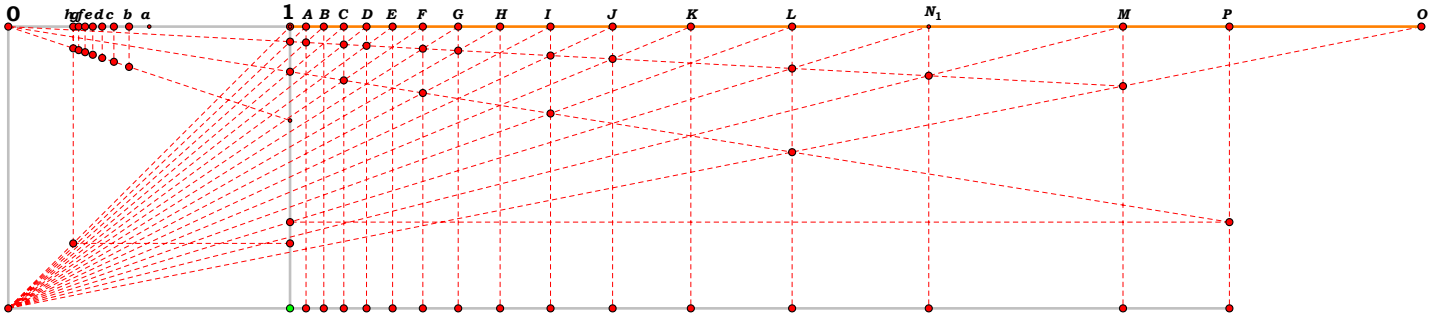
$\frac{13 \cdot N_1}{(13 \cdot N_1) - 12 \cdot (N_1 - 1)} - L = 0.00000$

$\frac{13 \cdot N_1}{(13 \cdot N_1) - 13 \cdot (N_1 - 1)} - N_1 = 0.00000$

$\frac{13 \cdot N_1}{(13 \cdot N_1) - 14 \cdot (N_1 - 1)} - M = 0.00000$

$\frac{13 \cdot N_1}{(13 \cdot N_1) - 15 \cdot (N_1 - 1)} - O = 0.00000$

$\frac{1}{h} - P = 0.00000$



Unit = 1.00000

1 = 1.00000

0 = 0.00000

a = 0.50000

b = 0.42857

c = 0.37500

d = 0.33333

e = 0.30000

f = 0.27273

g = 0.25000

h = 0.23077

$\frac{3}{6} = 0.50000$

$\frac{3}{7} = 0.42857$

$\frac{3}{8} = 0.37500$

$\frac{3}{9} = 0.33333$

$\frac{3}{10} = 0.30000$

$\frac{3}{11} = 0.27273$

$\frac{3}{12} = 0.25000$

$\frac{3}{13} = 0.23077$

A = 1.05638

B = 1.11950

C = 1.19064

D = 1.27143

E = 1.36399

F = 1.47109

G = 1.59643

H = 1.74512

I = 1.92436

J = 2.14462

K = 2.42183

L = 2.78134

N_1 = 3.26618

M = 3.95576

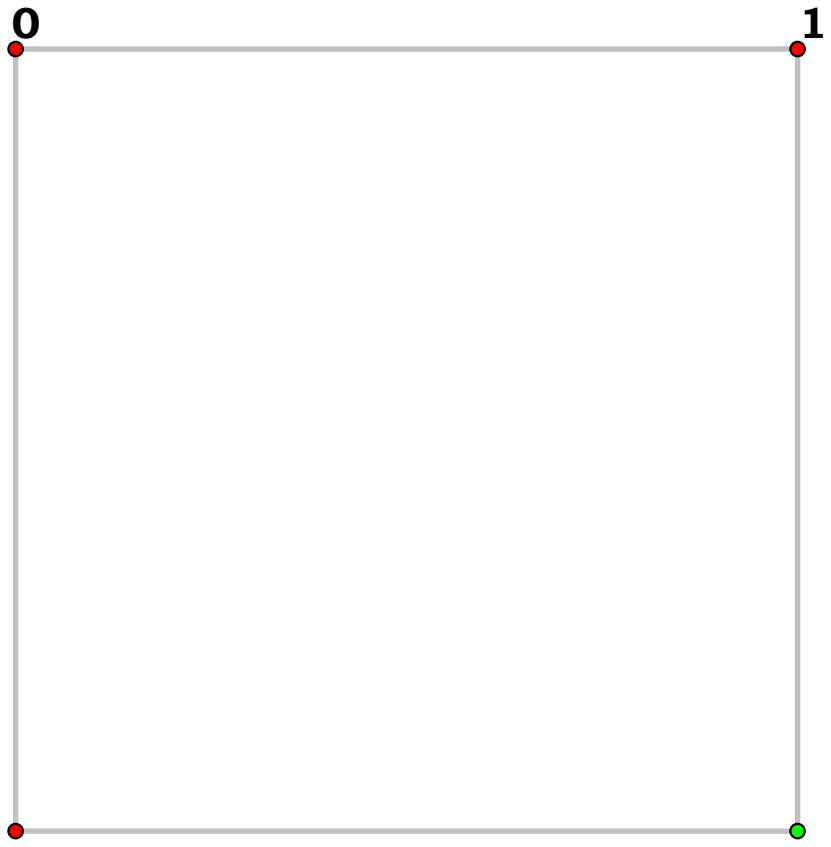
O = 5.01444

P = 4.33333

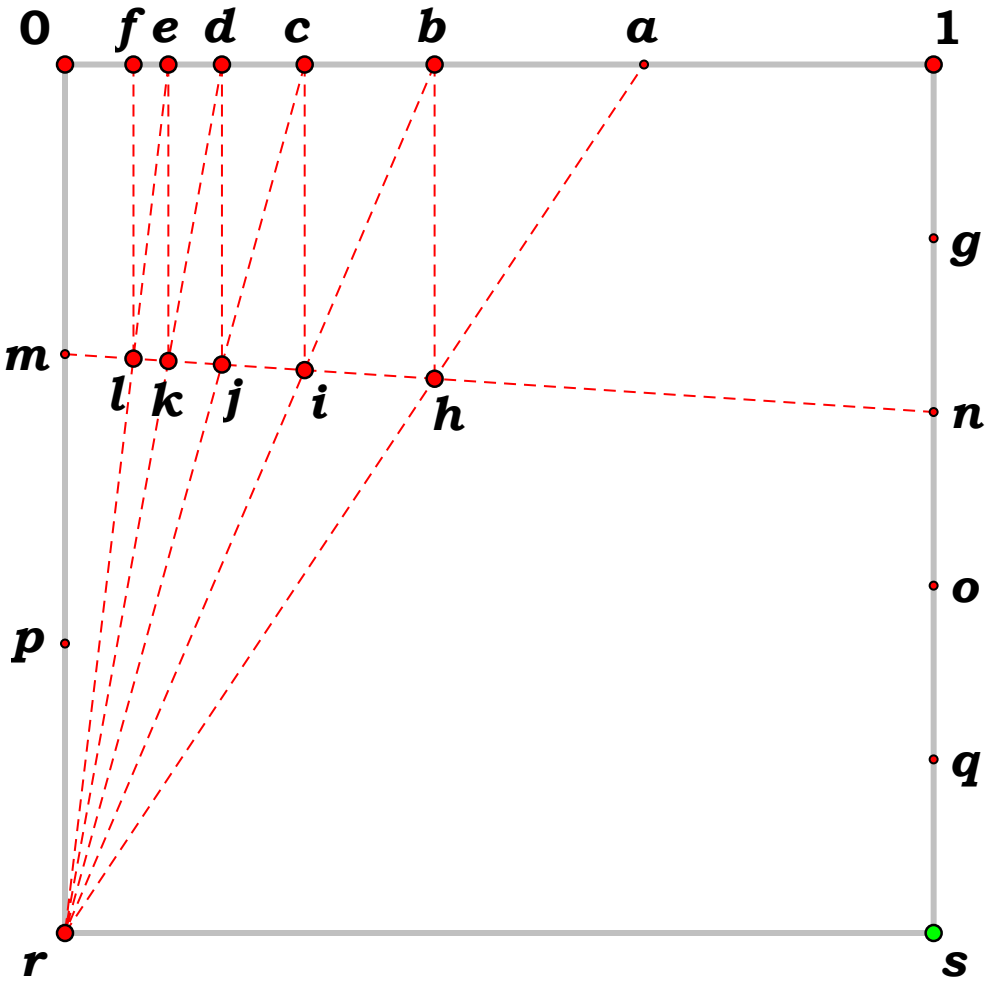
Unit **= 1.00000**

1 = 1.00000

0 = 0.00000



Unit = 1.00000
1 = 1.00000
0 = 0.00000
a = 0.66667
b = 0.42553
c = 0.27586
d = 0.18059
e = 0.11896
f = 0.07868



$Unit = 1.00000$

$1 = 1.00000$

$0 = 0.00000$

$a = 0.66667$

$b = 0.42553$

$c = 0.27586$

$d = 0.18059$

$e = 0.11896$

$f = 0.07868$

$\frac{2}{3} = 0.66667$

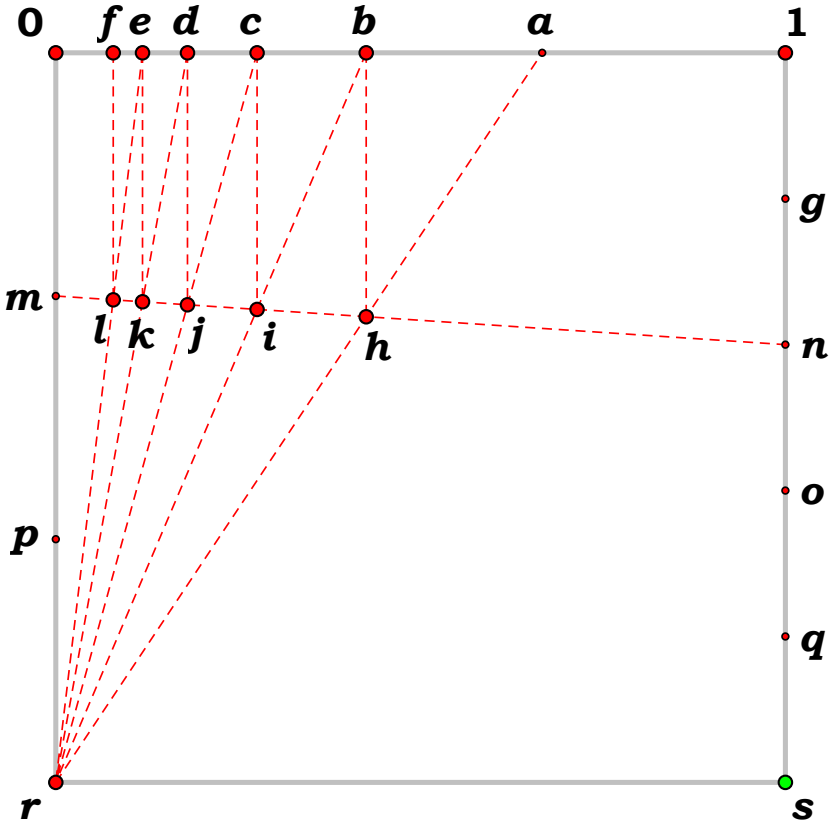
$\frac{20}{47} = 0.42553$

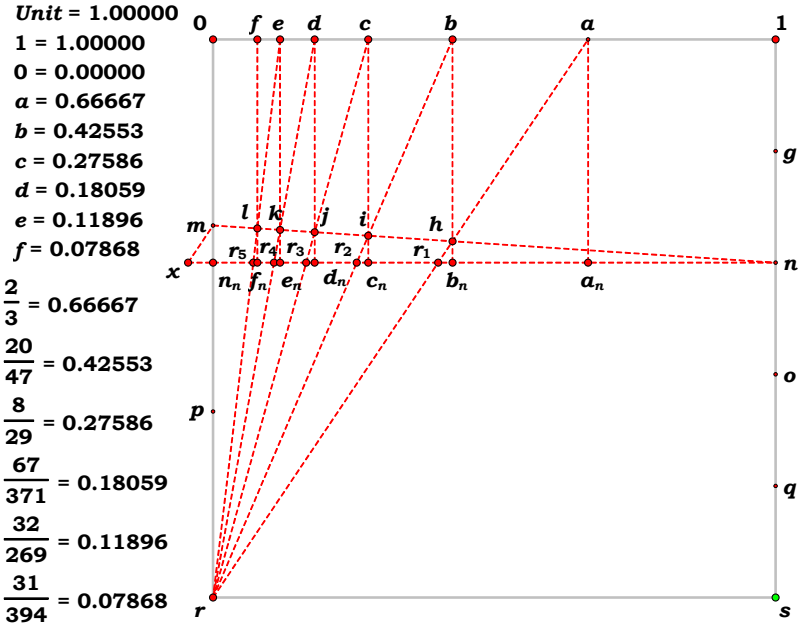
$\frac{8}{29} = 0.27586$

$\frac{67}{371} = 0.18059$

$\frac{32}{269} = 0.11896$

$\frac{31}{394} = 0.07868$





Given:

$a := .66666 \quad b := 5 \quad c := 2$

$d := 3 \quad e := 1 \quad n := \frac{c}{b} \quad m := \frac{e}{d}$

Descriptions:

$an := n \quad mn := n - m \quad ar := \sqrt{a^2 + 1}$

$ar1 := a^2(1 - n) \quad nnx := a \cdot mn$

$nx := 1 + nnx \quad nr1 := 1 - a + ar1$

$bnr1 := \frac{nnx \cdot nr1}{nx} \quad b := 1 - nr1 + bnr1$

$b = 0.42553$

Definitions

$an - n = 0 \quad mn - (n - m) = 0 \quad ar - \sqrt{a^2 + 1} = 0$

$ar1 - a^2(1 - n) = 0 \quad nnx - a \cdot (n - m) = 0$

$nx - (a \cdot n - a \cdot m + 1) = 0$

$nr1 - \left(a^2 - a^2 \cdot n - a + 1\right) = 0$

$bnr1 - \frac{a \cdot (n - m) \cdot \left(a^2 - a^2 \cdot n - a + 1\right)}{(a \cdot n - a \cdot m + 1)} = 0 \quad b - \frac{a^2 - a^2 \cdot n - a + a \cdot m - a \cdot n}{a \cdot m - a \cdot n - 1} = 0$

$b - \frac{a \cdot (n - m + 1) - (1 - n) \cdot a^2}{1 - (m - n) \cdot a} = 0$

$Unit = 1.00000$

$1 = 1.00000$

$0 = 0.00000$

$a = 0.66667$

$b = 0.42553$

$c = 0.27586$

$d = 0.18059$

$e = 0.11896$

$f = 0.07868$

$\frac{2}{3} = 0.66667$

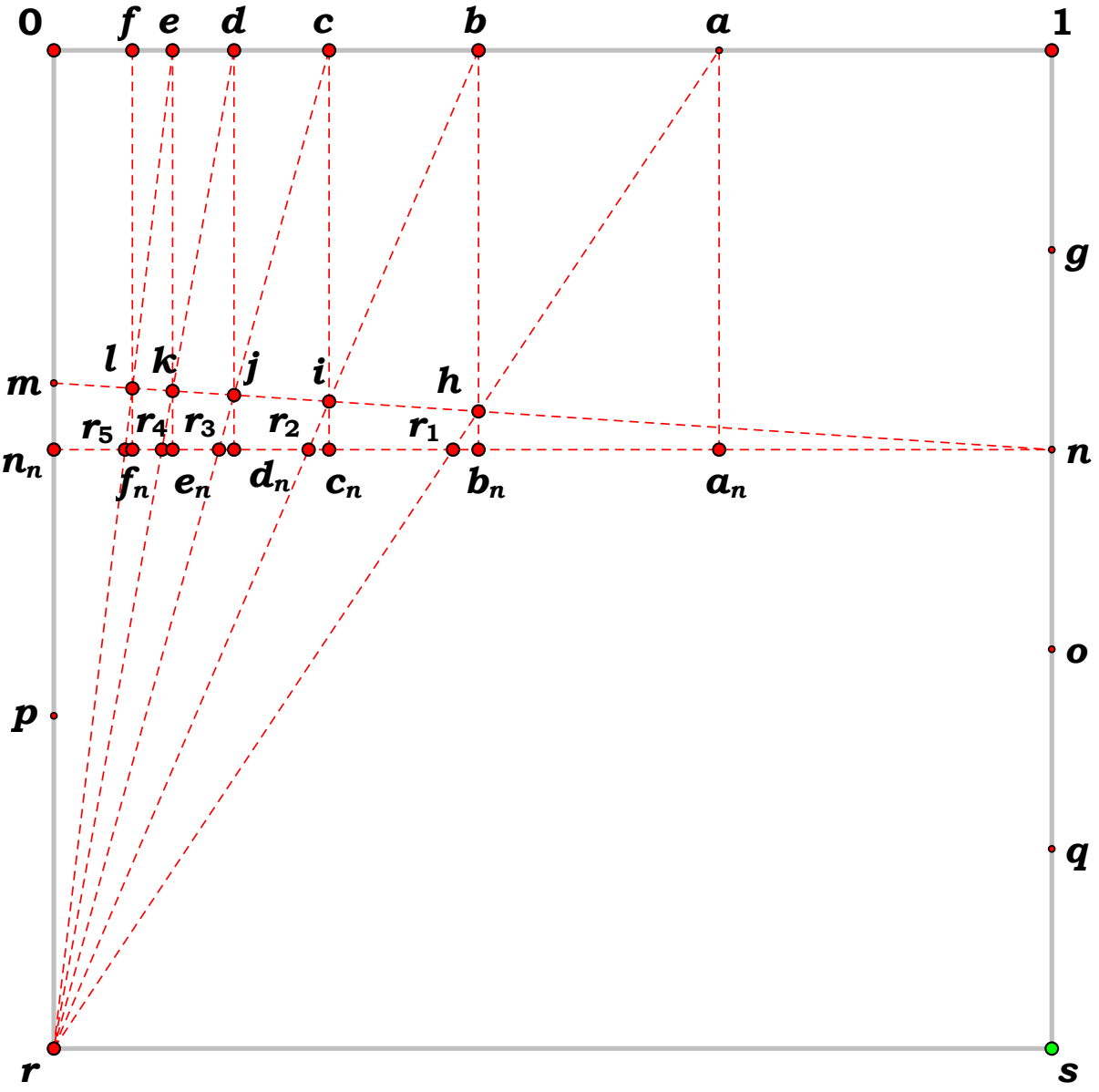
$\frac{20}{47} = 0.42553$

$\frac{8}{29} = 0.27586$

$\frac{67}{371} = 0.18059$

$\frac{32}{269} = 0.11896$

$\frac{31}{394} = 0.07868$



$a \cdot (n - m + 1) - a^2 \cdot (1 - n) = 0.44444$

$(1 - a \cdot (m - n)) = 1.04444$

$n = 0.40000$

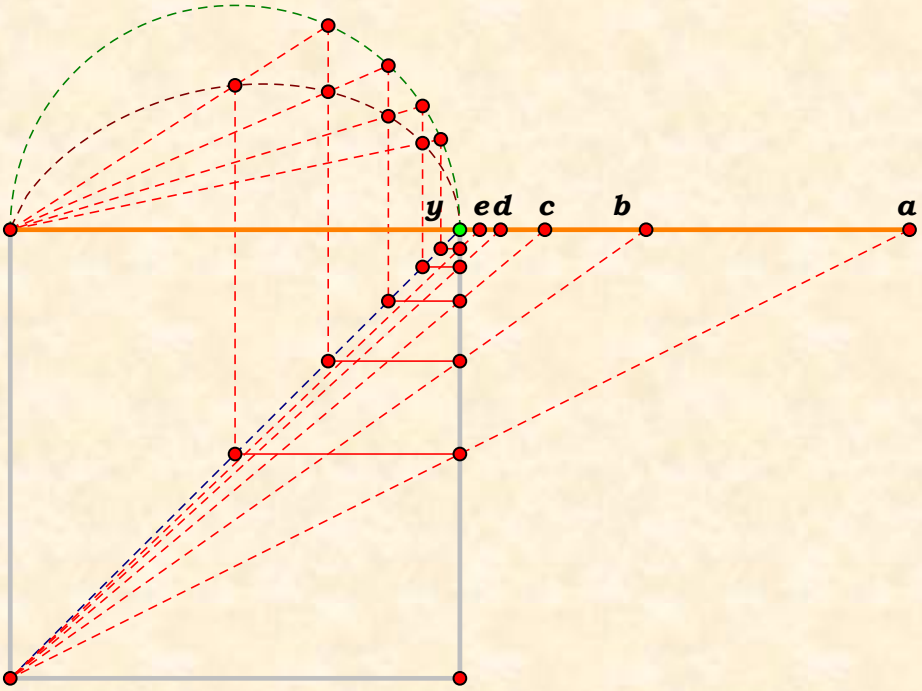
$m = 0.33333$

$$\frac{a \cdot (n - m + 1) - a^2 \cdot (1 - n)}{1 - a \cdot (m - n)} = 0.42553$$

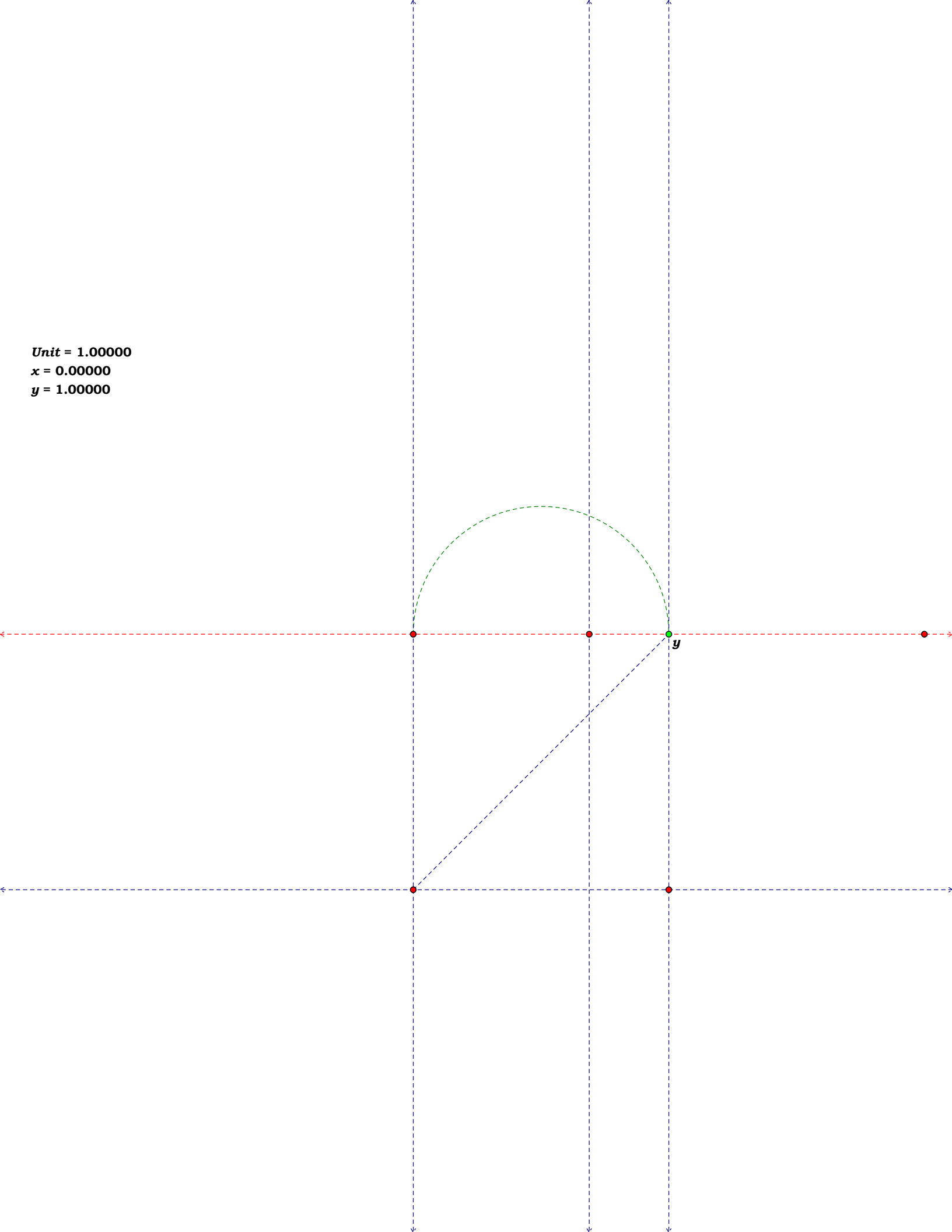
Geometric Series

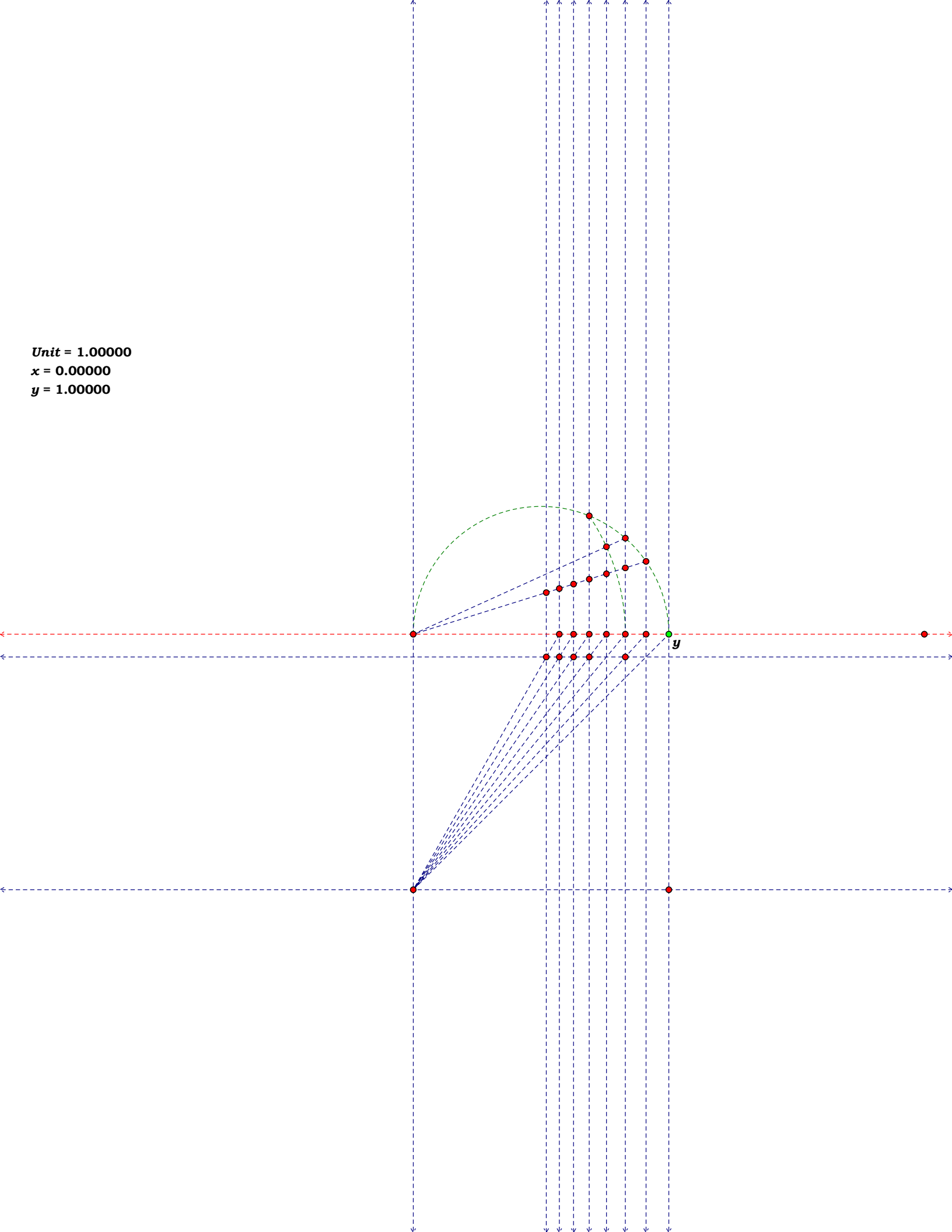
$a = 2.00000$
$b = 1.41421$
$c = 1.18921$
$d = 1.09051$
$e = 1.04427$

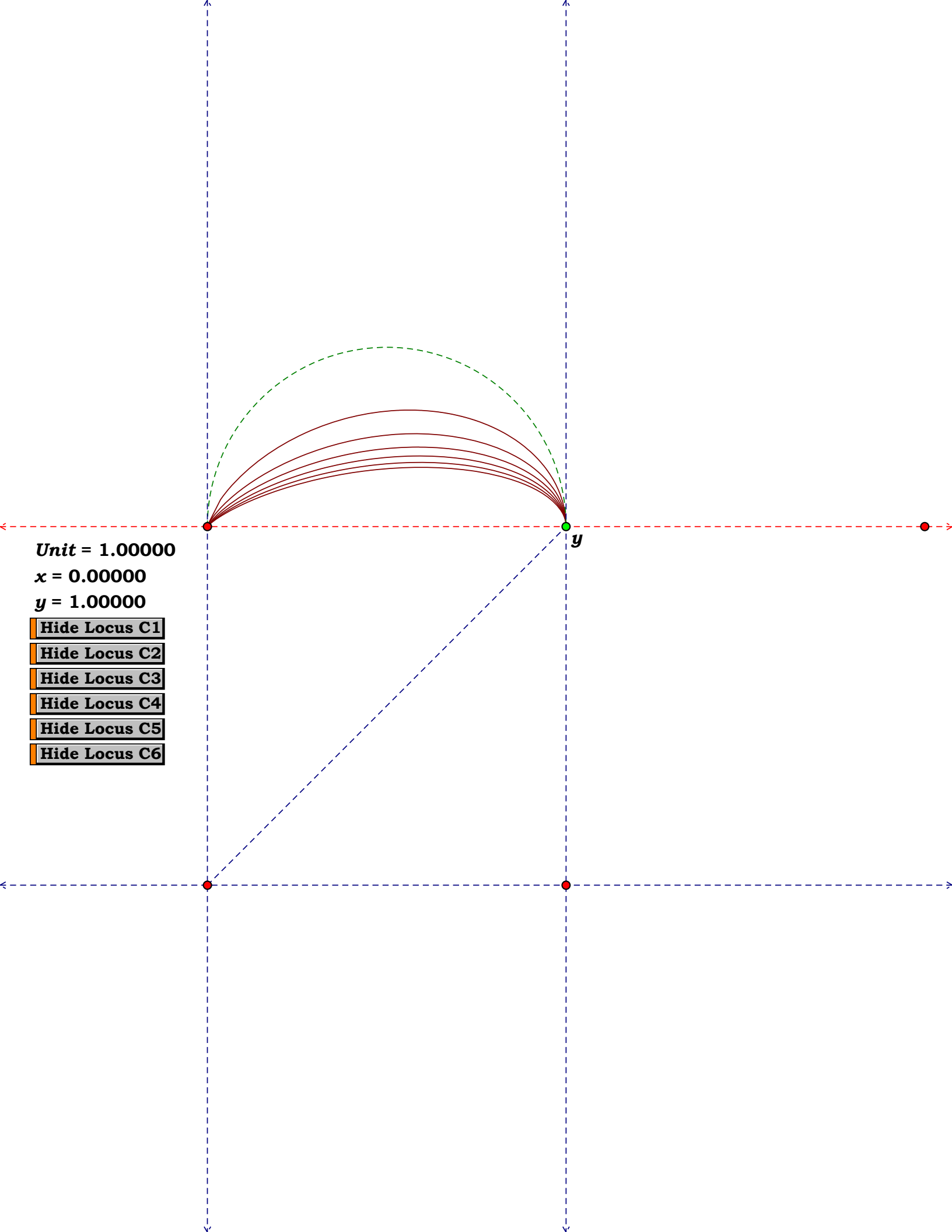
$a^{\frac{1}{2}} - b = 0.00000$
$a^{\frac{1}{4}} - c = 0.00000$
$a^{\frac{1}{8}} - d = 0.00000$
$a^{\frac{1}{16}} - e = 0.00000$

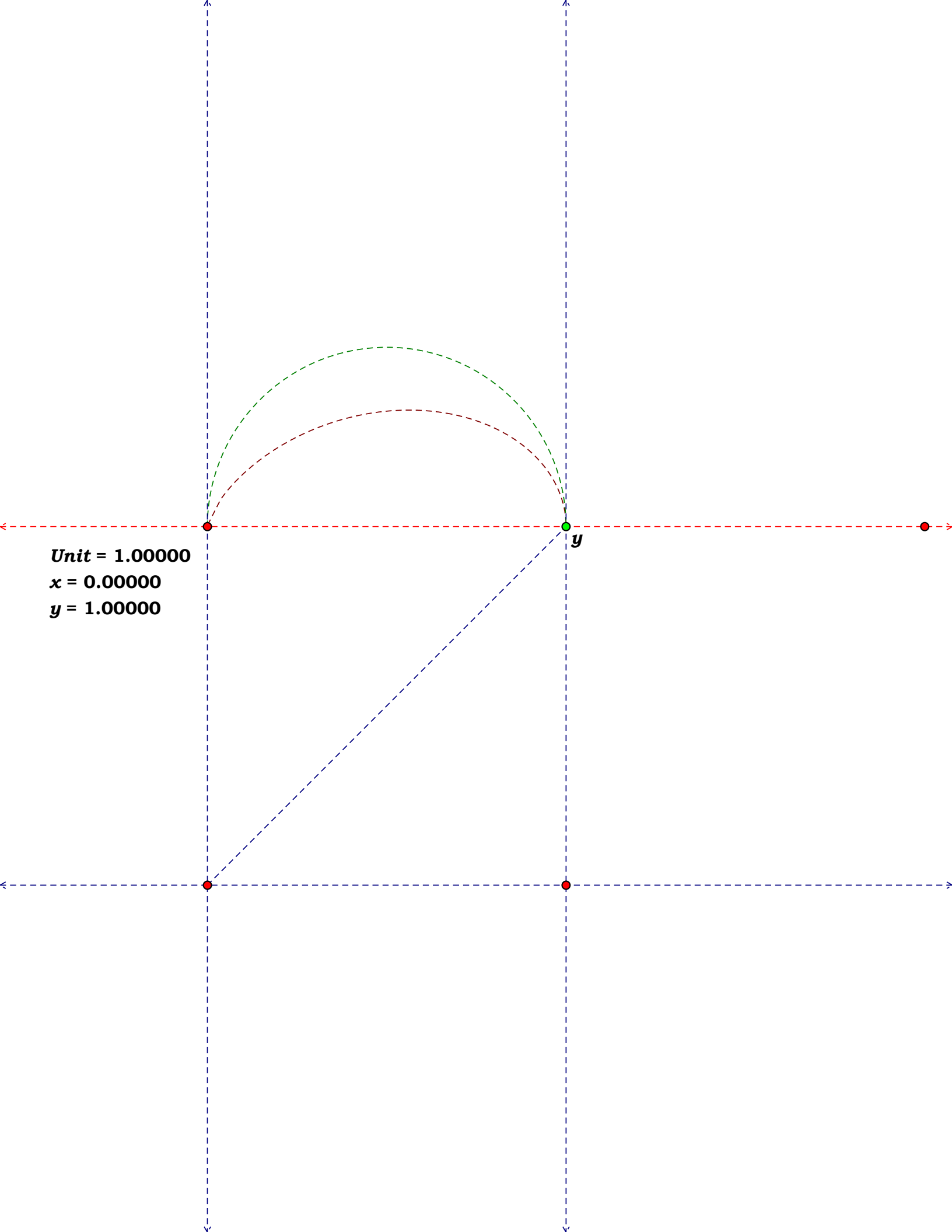


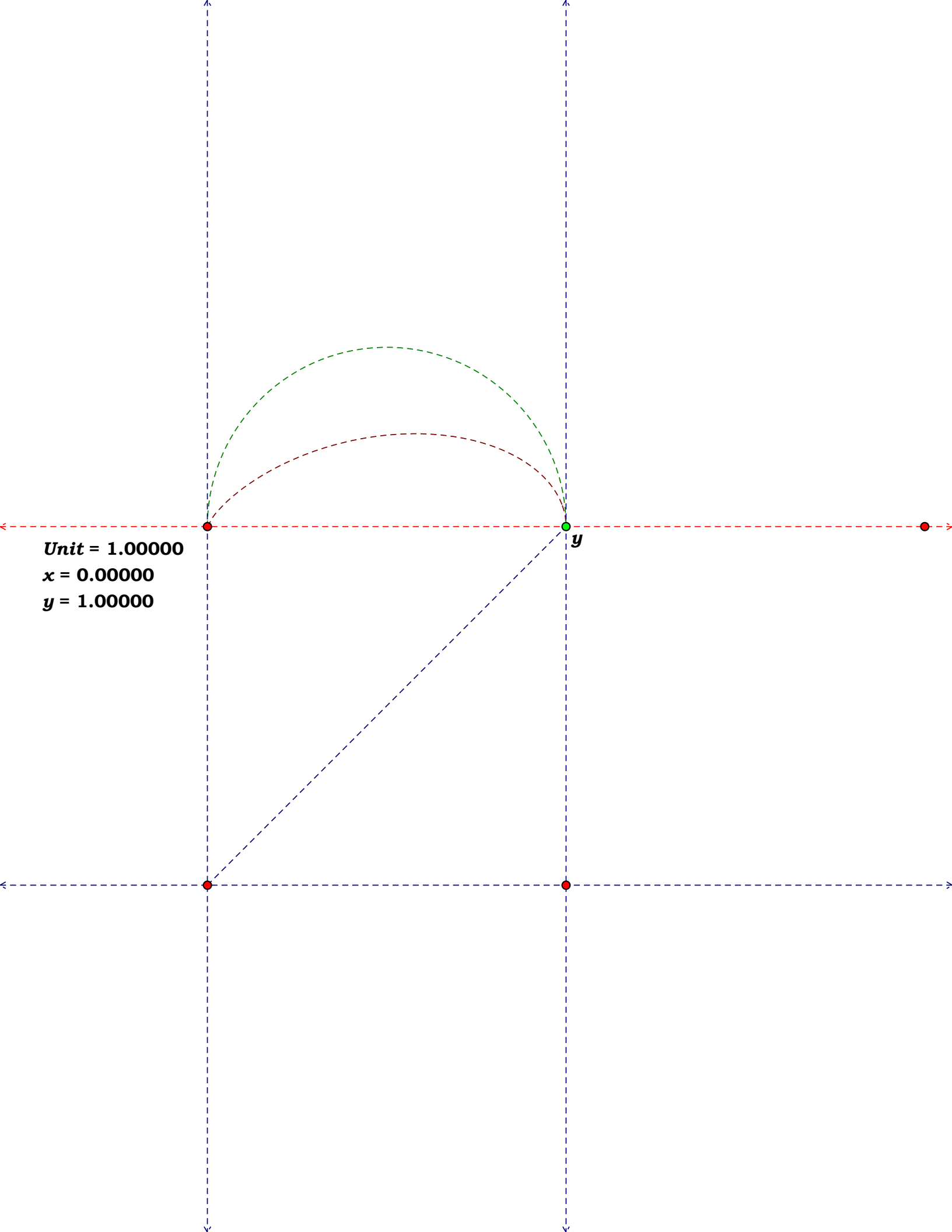
Template File

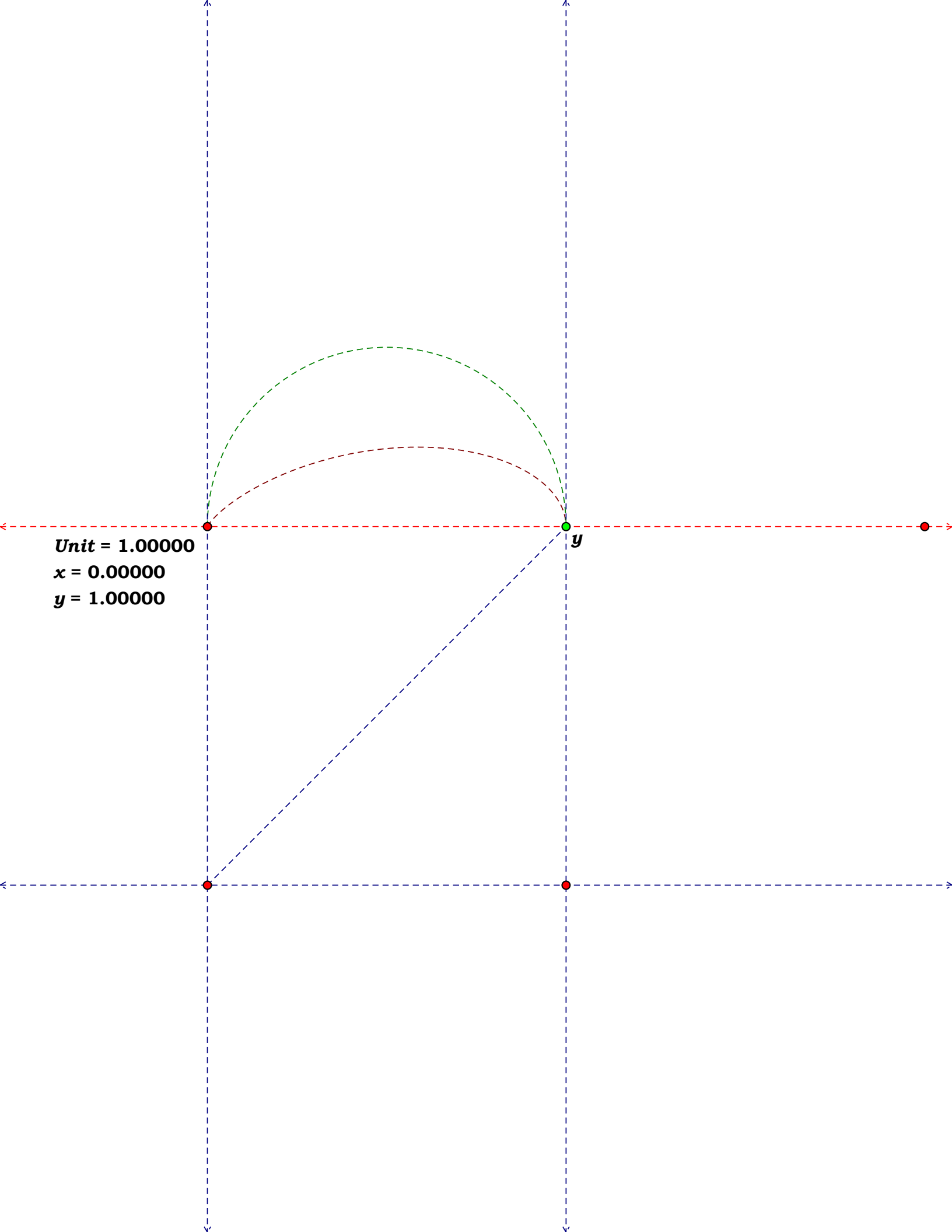

Unit = 1.00000
x = 0.00000
y = 1.00000
y

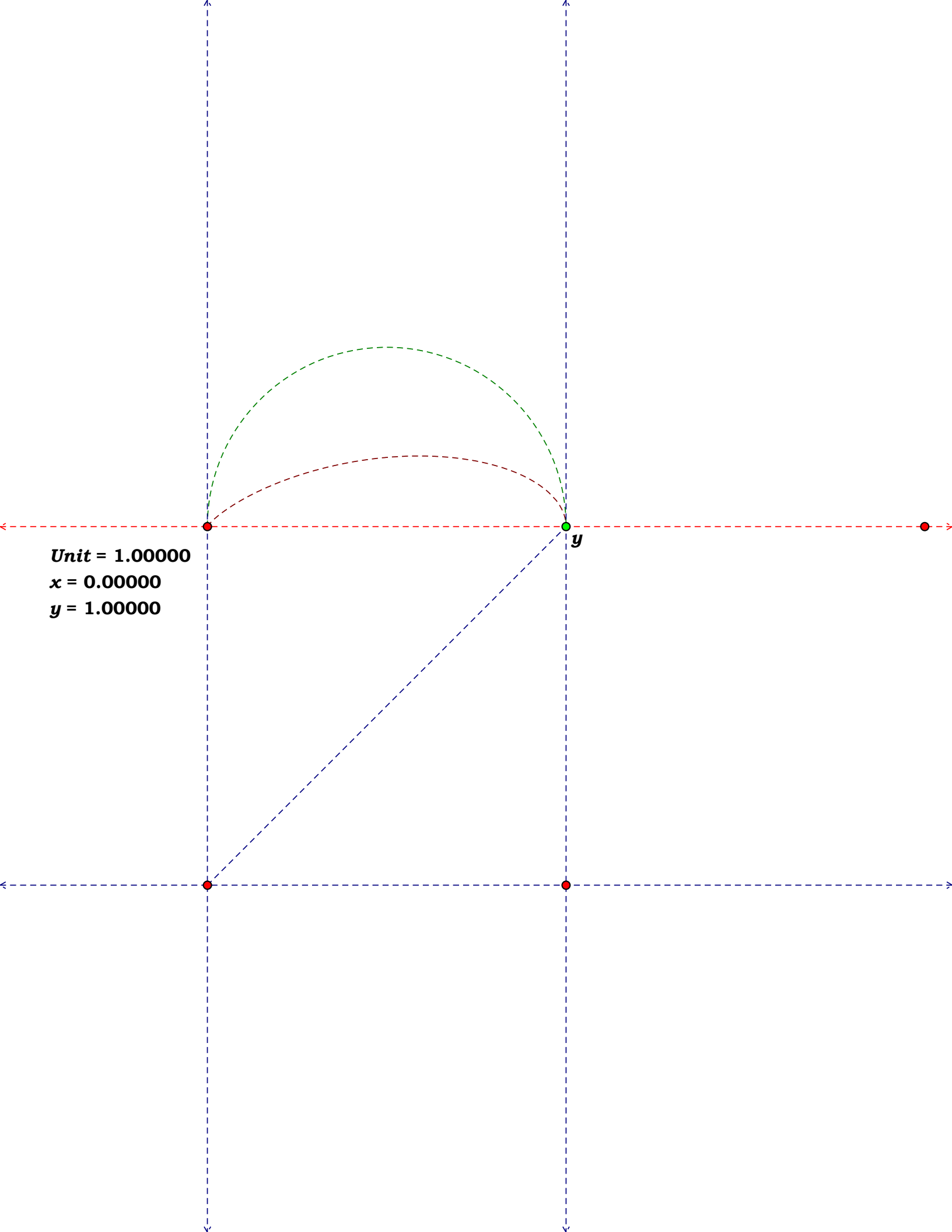

Unit = 1.00000
x = 0.00000
y = 1.00000
y

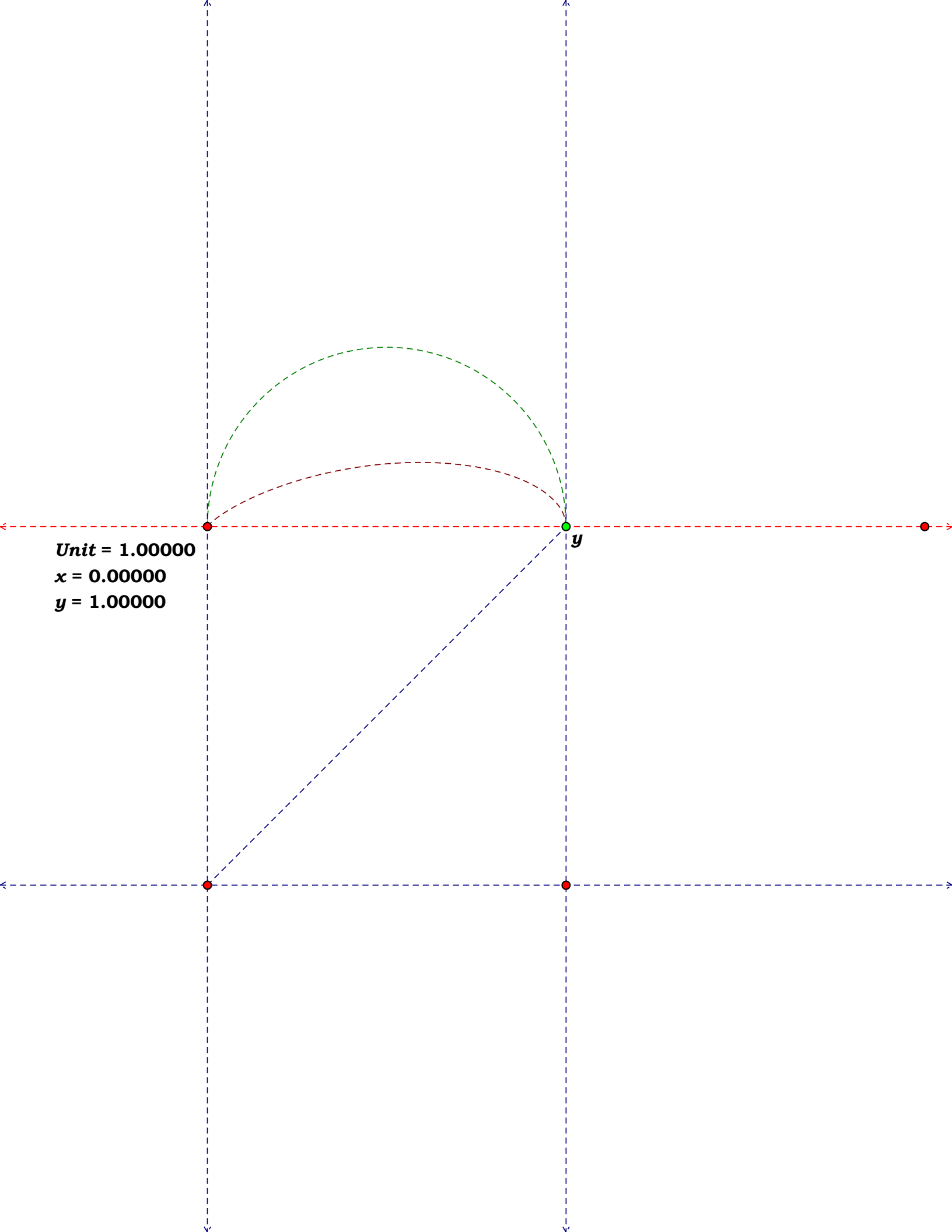

y
Unit = 1.00000
x = 0.00000
y = 1.00000
Hide Locus C1
Hide Locus C2
Hide Locus C3
Hide Locus C4
Hide Locus C5
Hide Locus C6

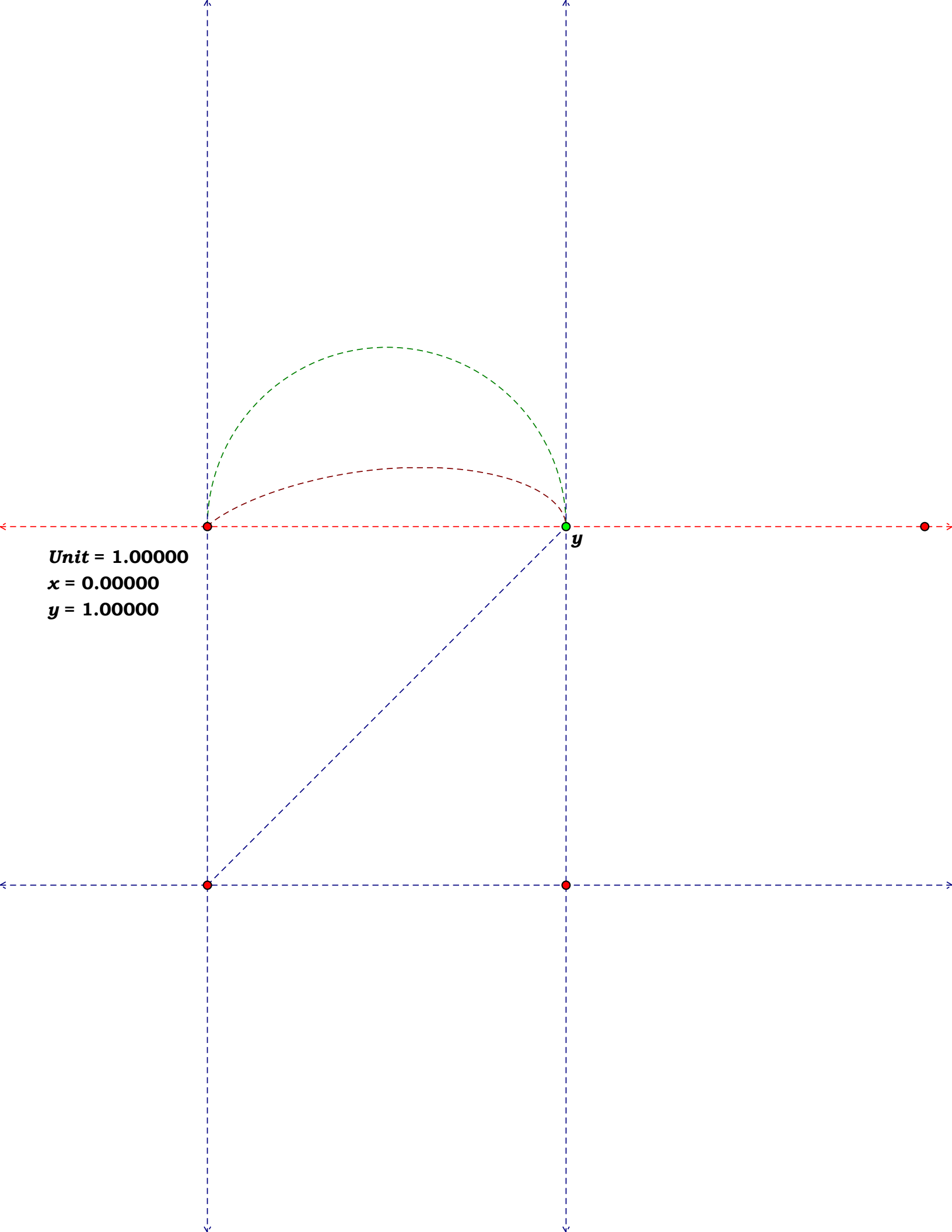

y
Unit = 1.00000
x = 0.00000
y = 1.00000


y
Unit = 1.00000
x = 0.00000
y = 1.00000


y
Unit = 1.00000
x = 0.00000
y = 1.00000


y
Unit = 1.00000
x = 0.00000
y = 1.00000

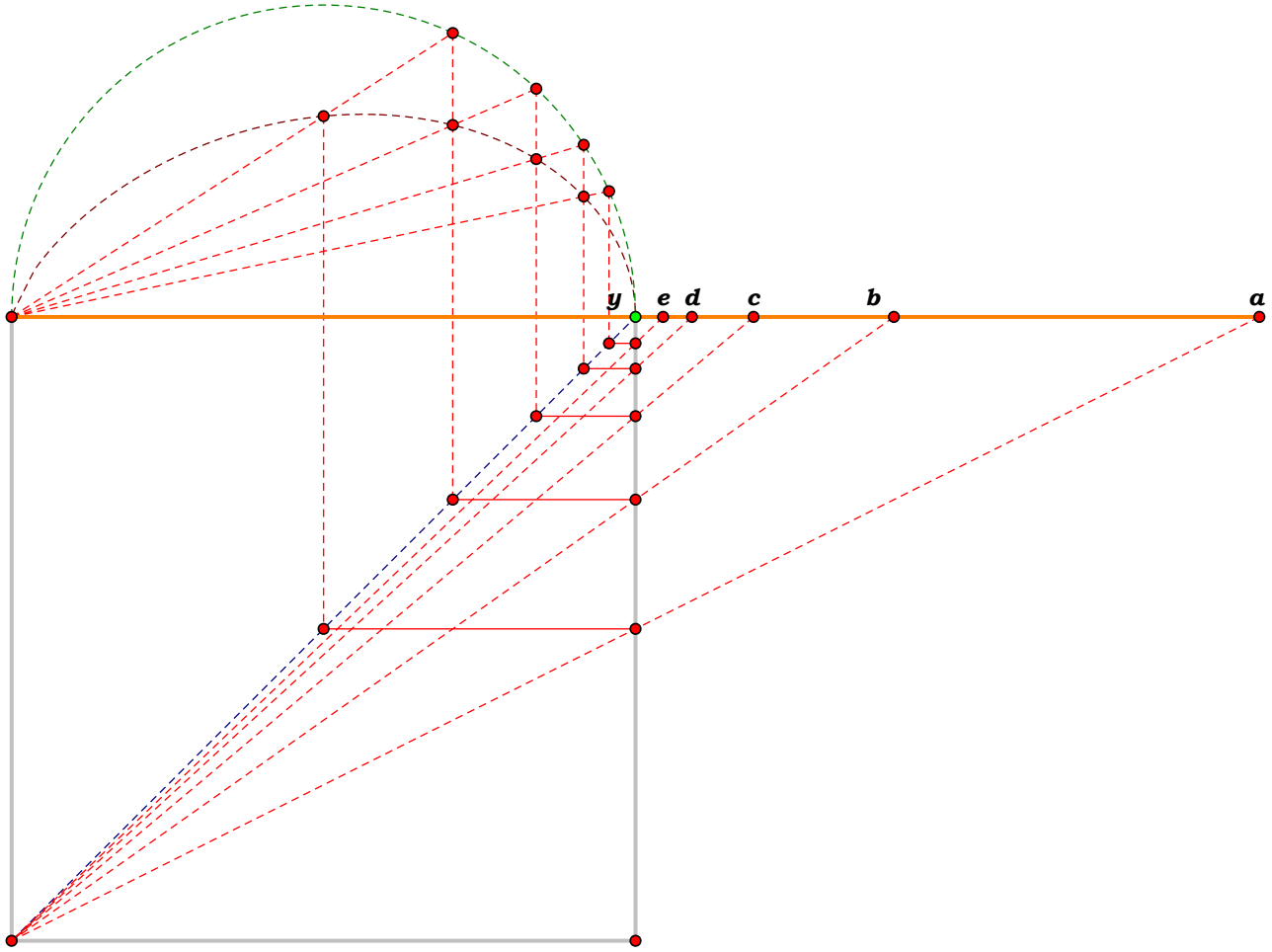

y
Unit = 1.00000
x = 0.00000
y = 1.00000


y
Unit = 1.00000
x = 0.00000
y = 1.00000

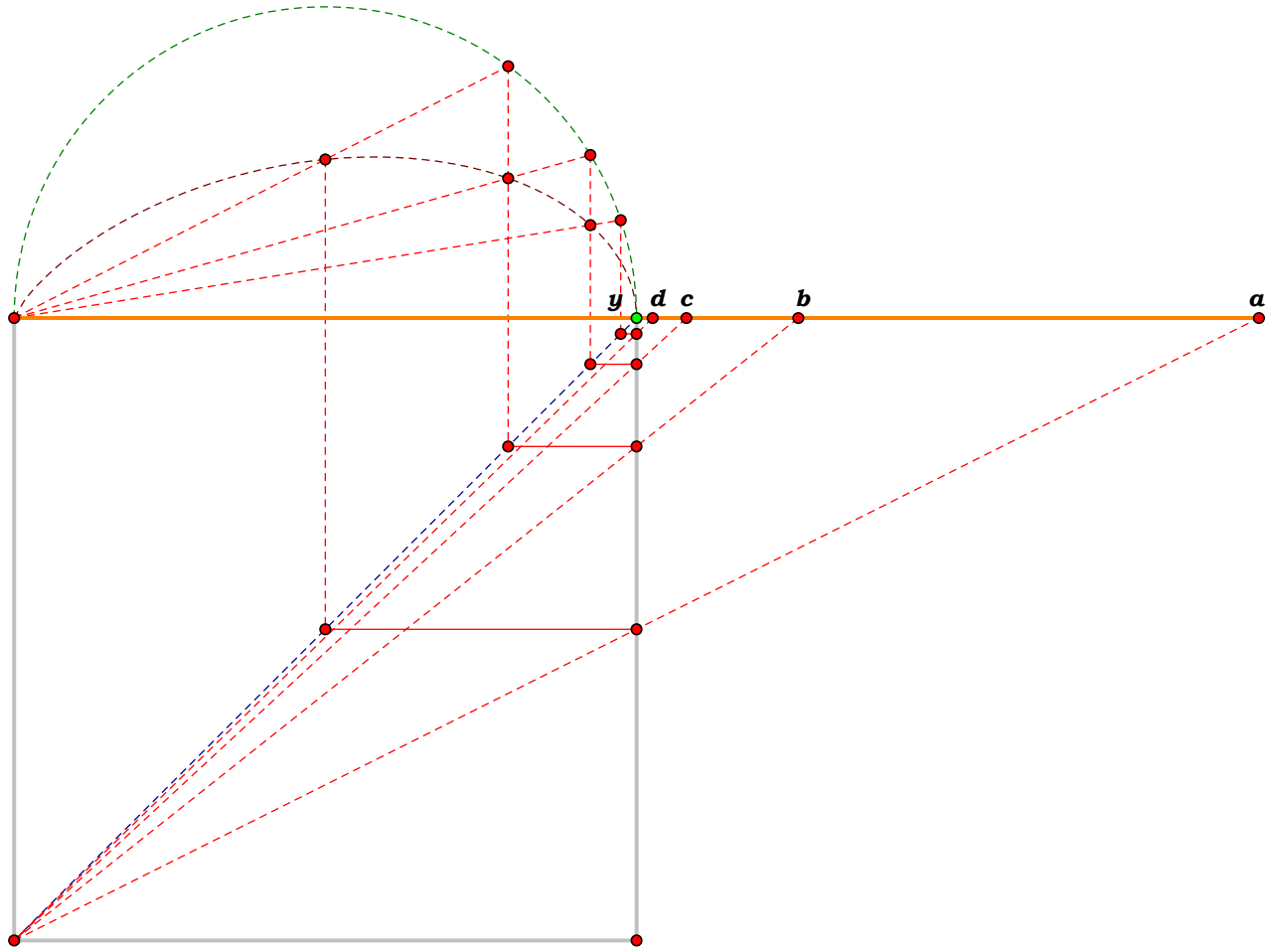
$Unit = 1.00000$
$x = 0.00000$
$y = 1.00000$

$a = 2.00000$
$b = 1.41421$
$c = 1.18921$
$d = 1.09051$
$e = 1.04427$

$a^{\frac{1}{2}} - b = 0.00000$
$a^{\frac{1}{4}} - c = 0.00000$
$a^{\frac{1}{8}} - d = 0.00000$
$a^{\frac{1}{16}} - e = 0.00000$



First Curve



$Unit = 1.00000$

$x = 0.00000$

$y = 1.00000$

$a = 2.00000$

$b = 1.25992$

$c = 1.08006$

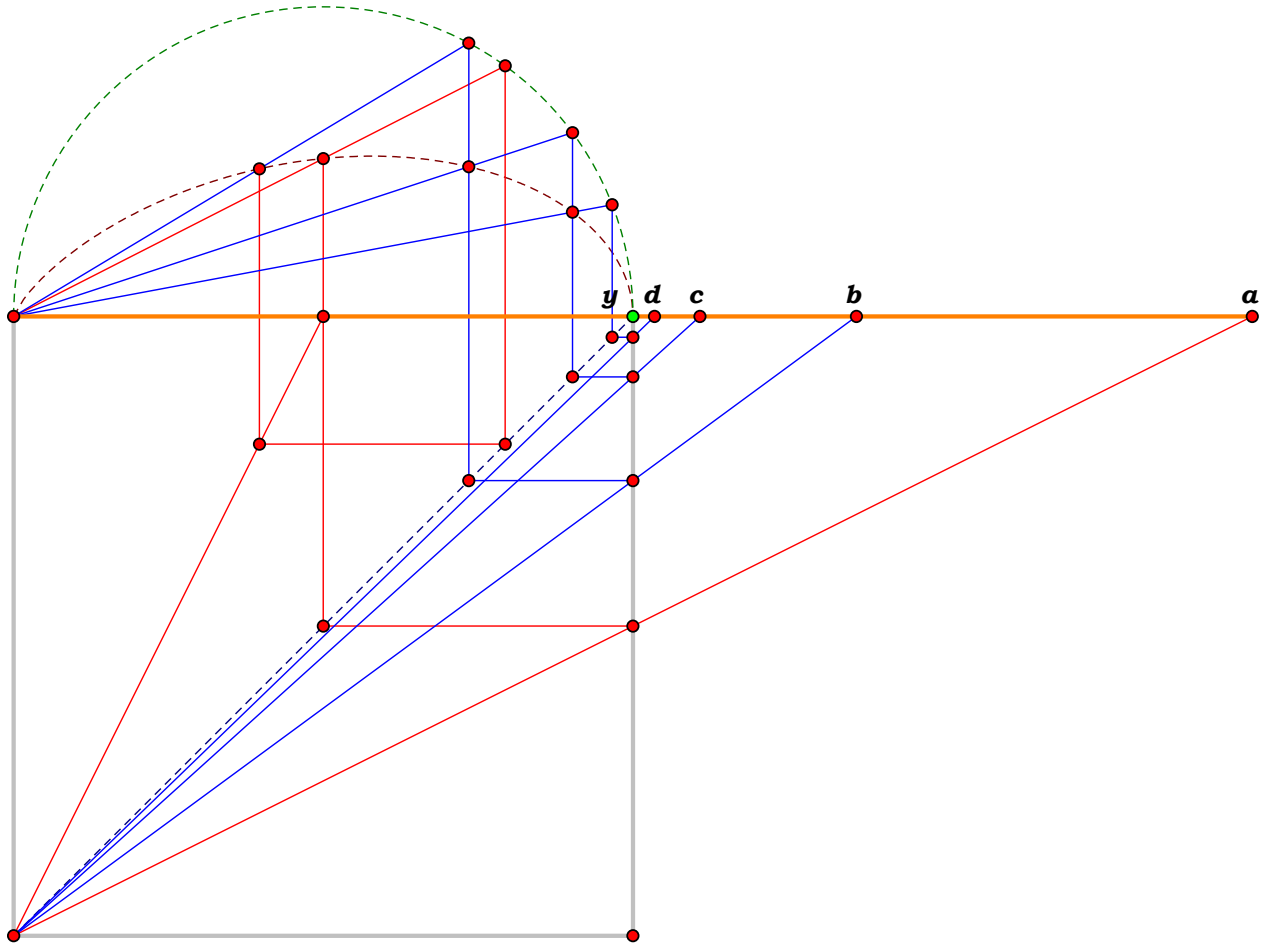
$d = 1.02600$

$a^{\frac{1}{3}} - b = 0.00000$

$a^{\frac{1}{9}} - c = 0.00000$

$a^{\frac{1}{27}} - d = 0.00000$

Second Curve



$Unit = 1.00000$

$x = 0.00000$

$y = 1.00000$

$a = 2.00000$

$b = 1.36079$

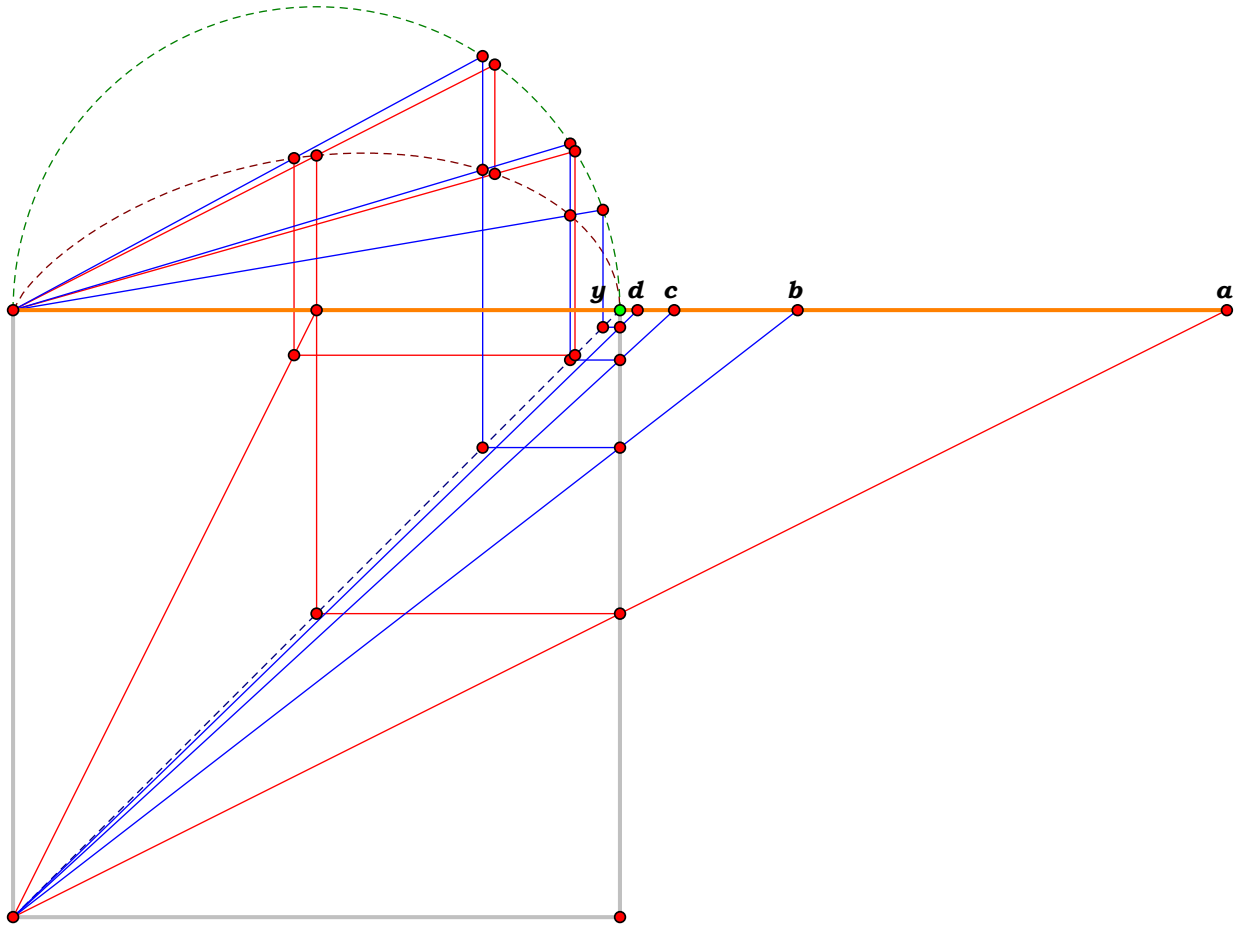
$c = 1.10815$

$d = 1.03482$

$a^{\frac{4}{9}} - b = 0.00000$

$a^{\frac{4}{27}} - c = 0.00000$

$a^{\frac{4}{81}} - d = 0.00000$



$Unit = 1.00000$

$x = 0.00000$

$y = 1.00000$

$a = 2.00000$

$b = 1.29268$

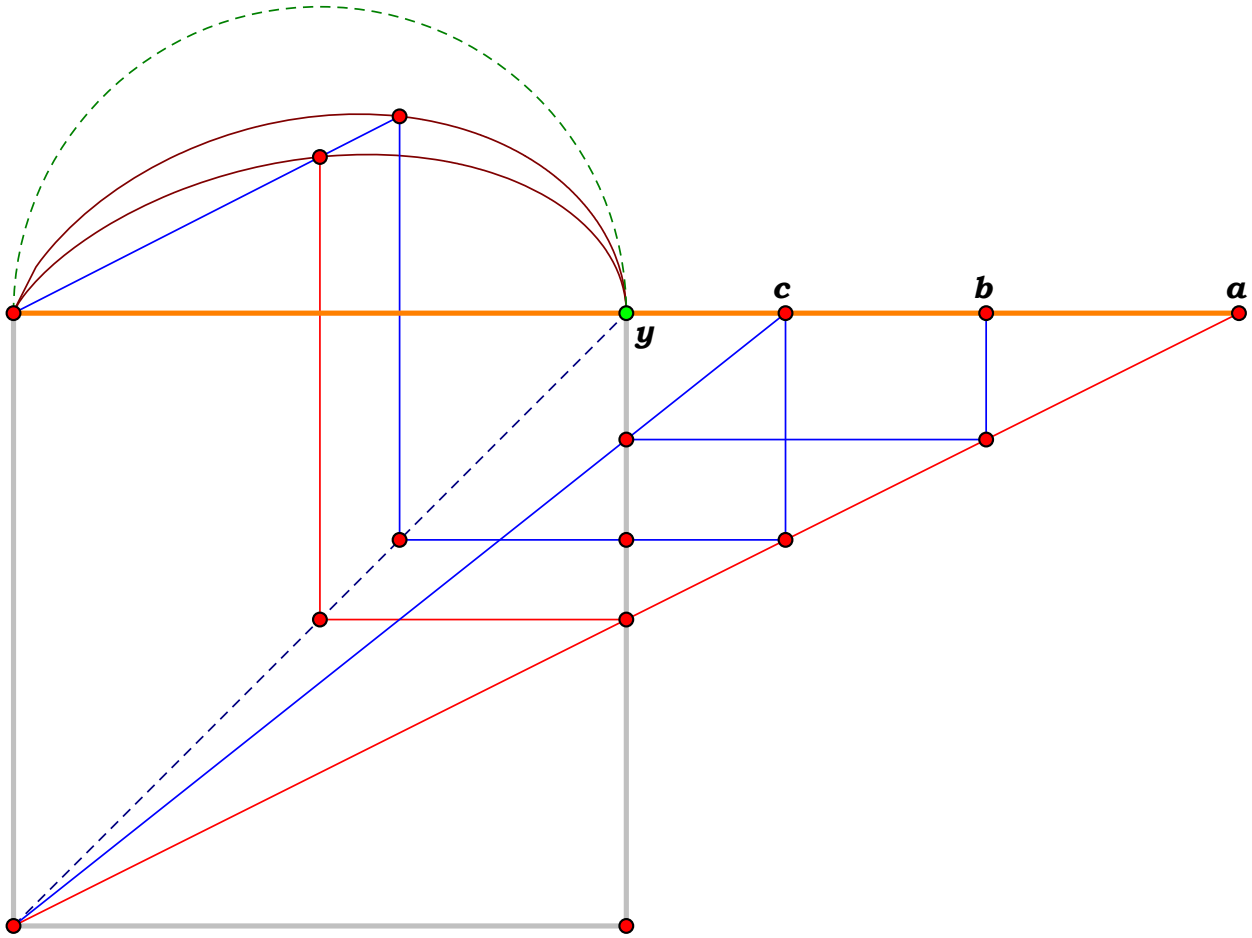
$c = 1.08934$

$d = 1.02894$

$a^{\frac{10}{27}} - b = 0.00000$

$a^{\frac{10}{81}} - c = 0.00000$

$a^{\frac{10}{243}} - d = 0.00000$



$Unit = 1.00000$

$x = 0.00000$

$y = 1.00000$

$a = 2.00000$

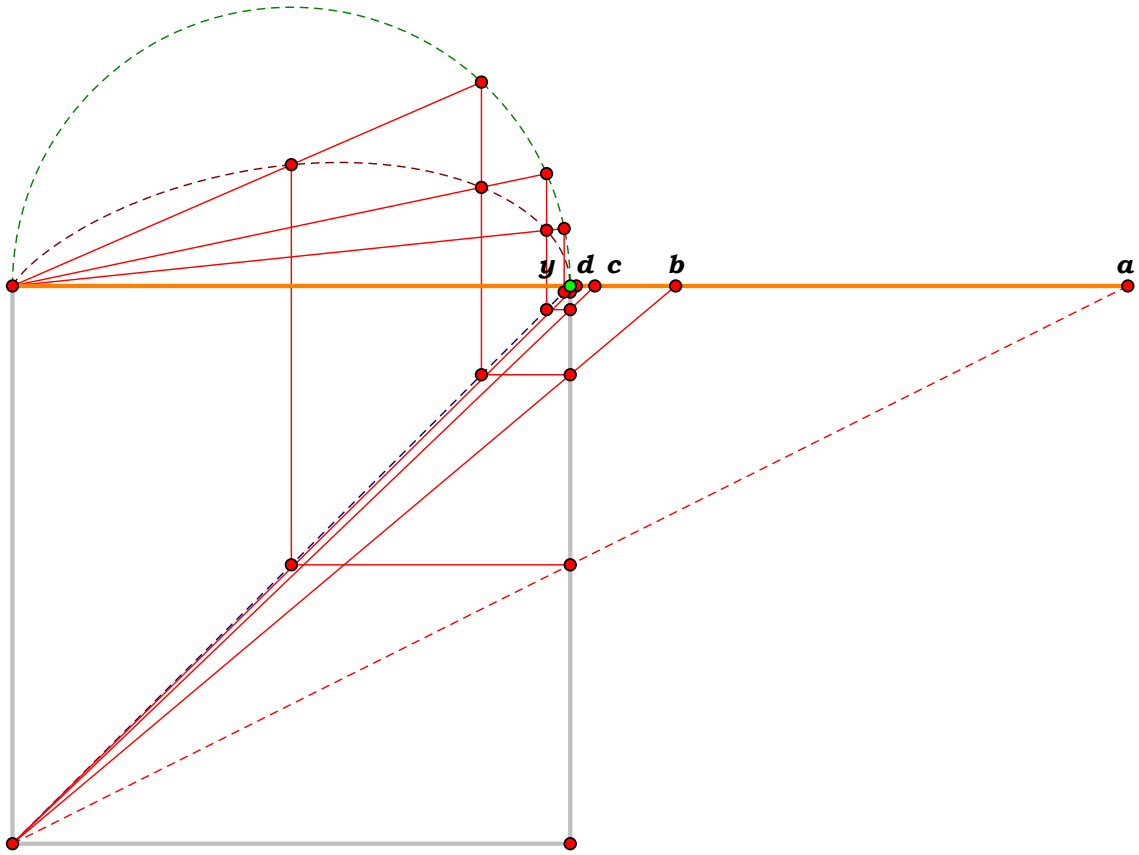
$b = 1.58740$

$c = 1.25992$

$a^{\frac{2}{3}} - b = 0.00000$

$a^{\frac{1}{3}} - c = 0.00000$

Two over three



$Unit = 1.00000$

$x = 0.00000$

$y = 1.00000$

$a = 2.00000$

$b = 1.18921$

$c = 1.04427$

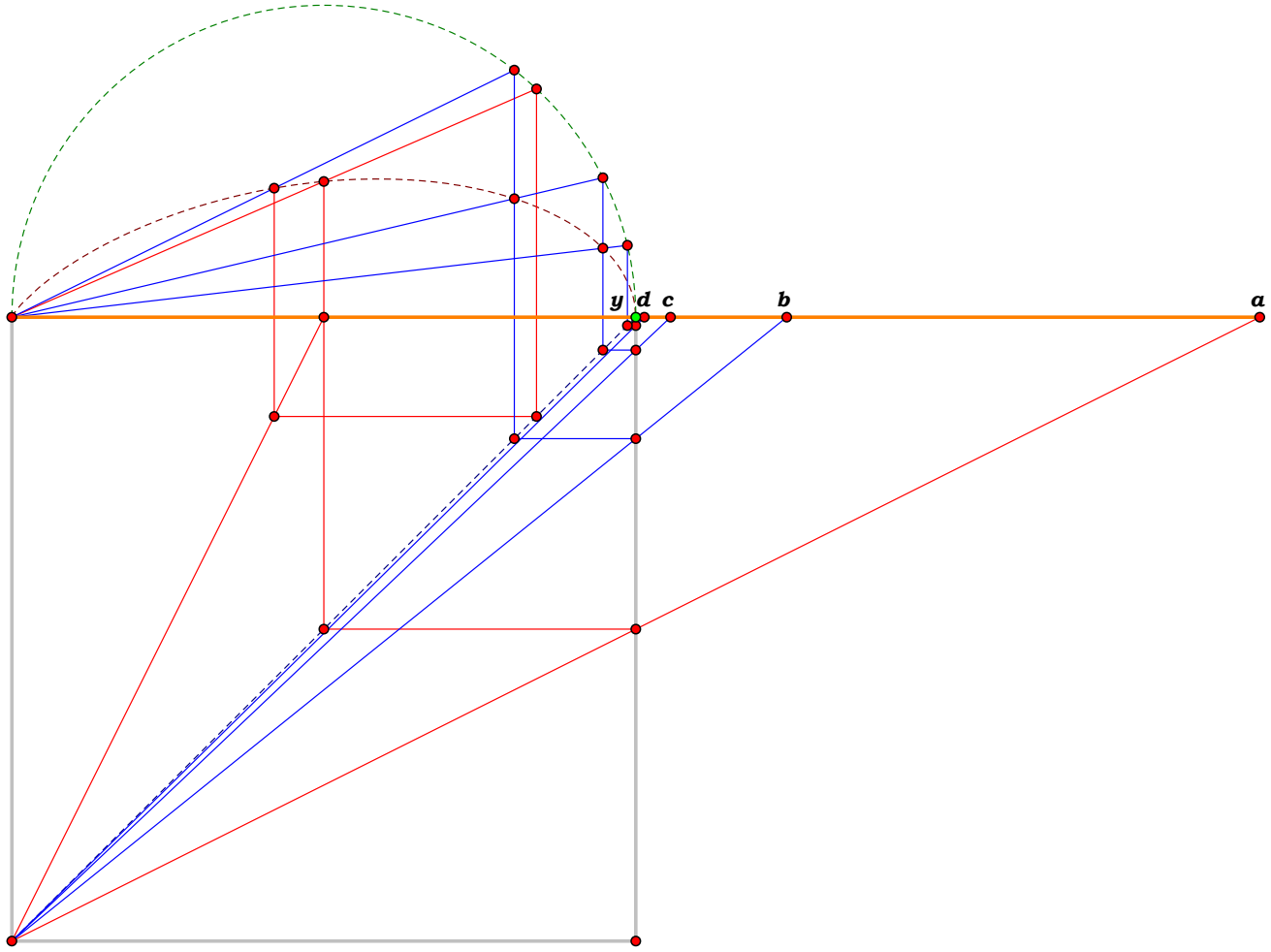
$x = 1.01089$

$a^{\frac{1}{4}} - b = 0.00000$

$a^{\frac{1}{16}} - c = 0.00000$

$a^{\frac{1}{64}} - x = 0.00000$

Third Curve



$Unit = 1.00000$

$x = 0.00000$

$y = 1.00000$

$a = 2.00000$

$b = 1.24186$

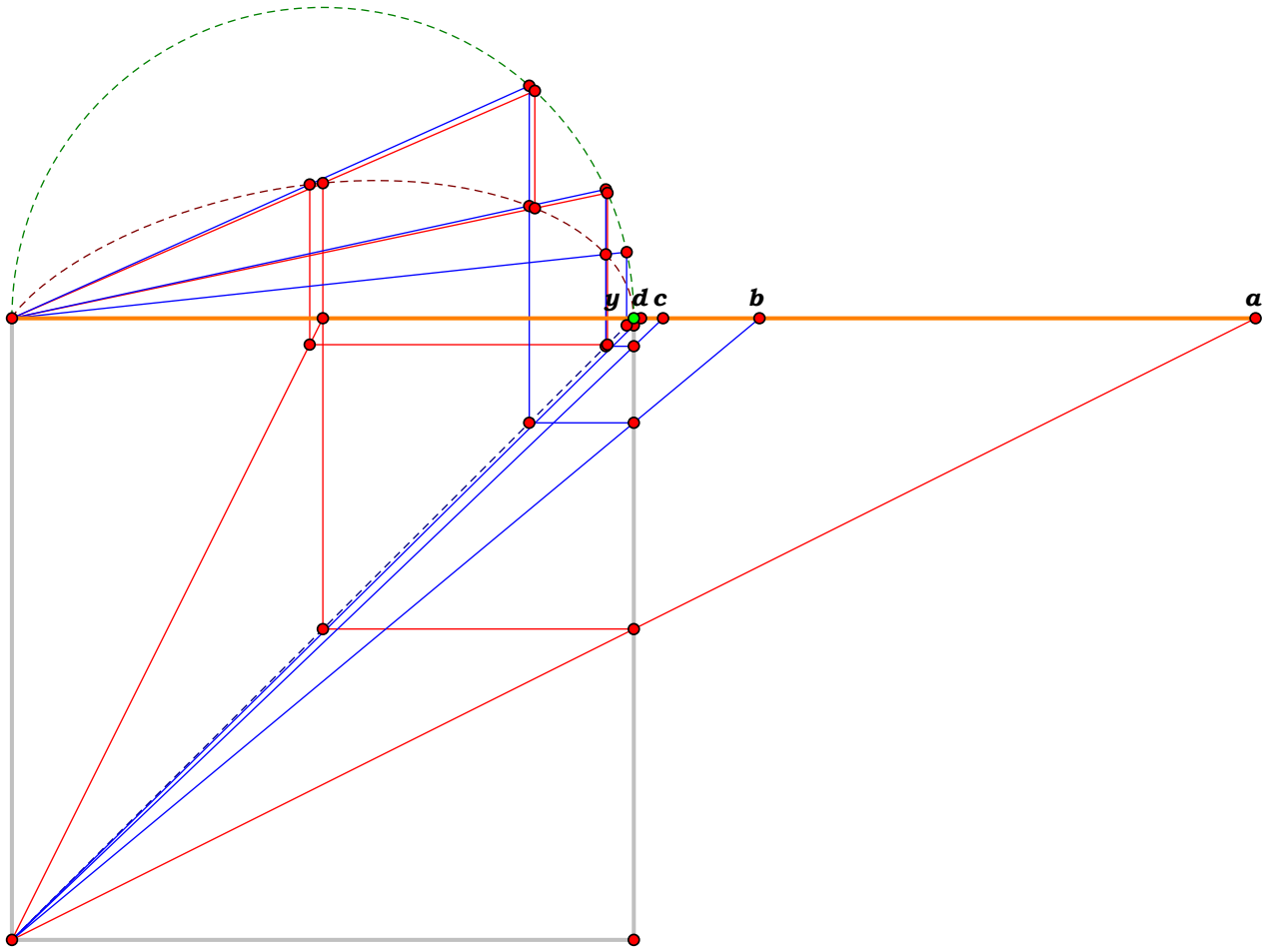
$c = 1.05565$

$d = 1.01363$

$a^{\frac{5}{16}} - b = 0.00000$

$a^{\frac{5}{64}} - c = 0.00000$

$a^{\frac{5}{256}} - d = 0.00000$



$Unit = 1.00000$

$x = 0.00000$

$y = 1.00000$

$a = 2.00000$

$b = 1.20216$

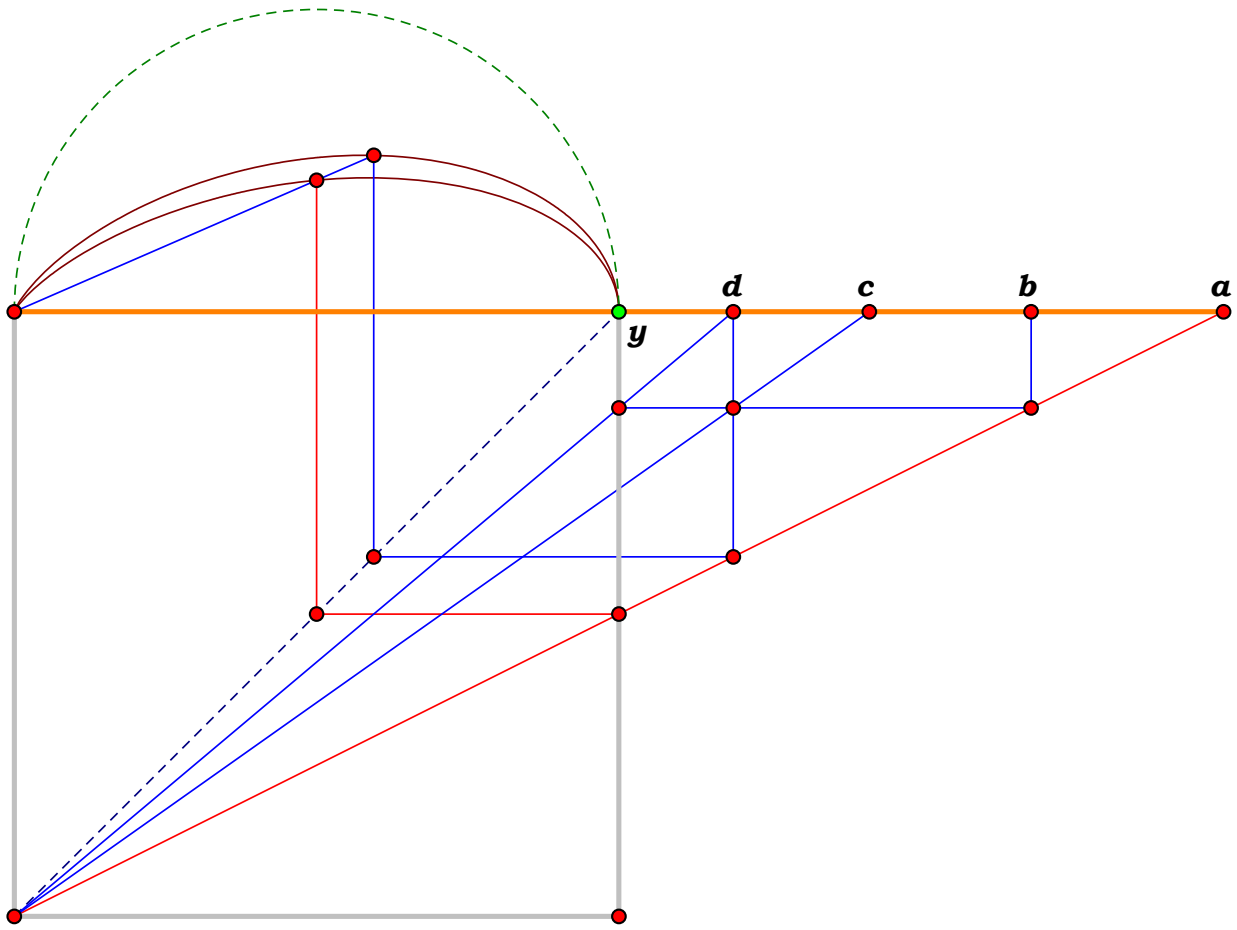
$c = 1.04711$

$d = 1.01157$

$a^{\frac{17}{64}} - b = 0.00000$

$a^{\frac{17}{256}} - c = 0.00000$

$a^{\frac{17}{1024}} - d = 0.00000$



$Unit = 1.00000$

$x = 0.00000$

$y = 1.00000$

$a = 2.00000$

$b = 1.68179$

$c = 1.41421$

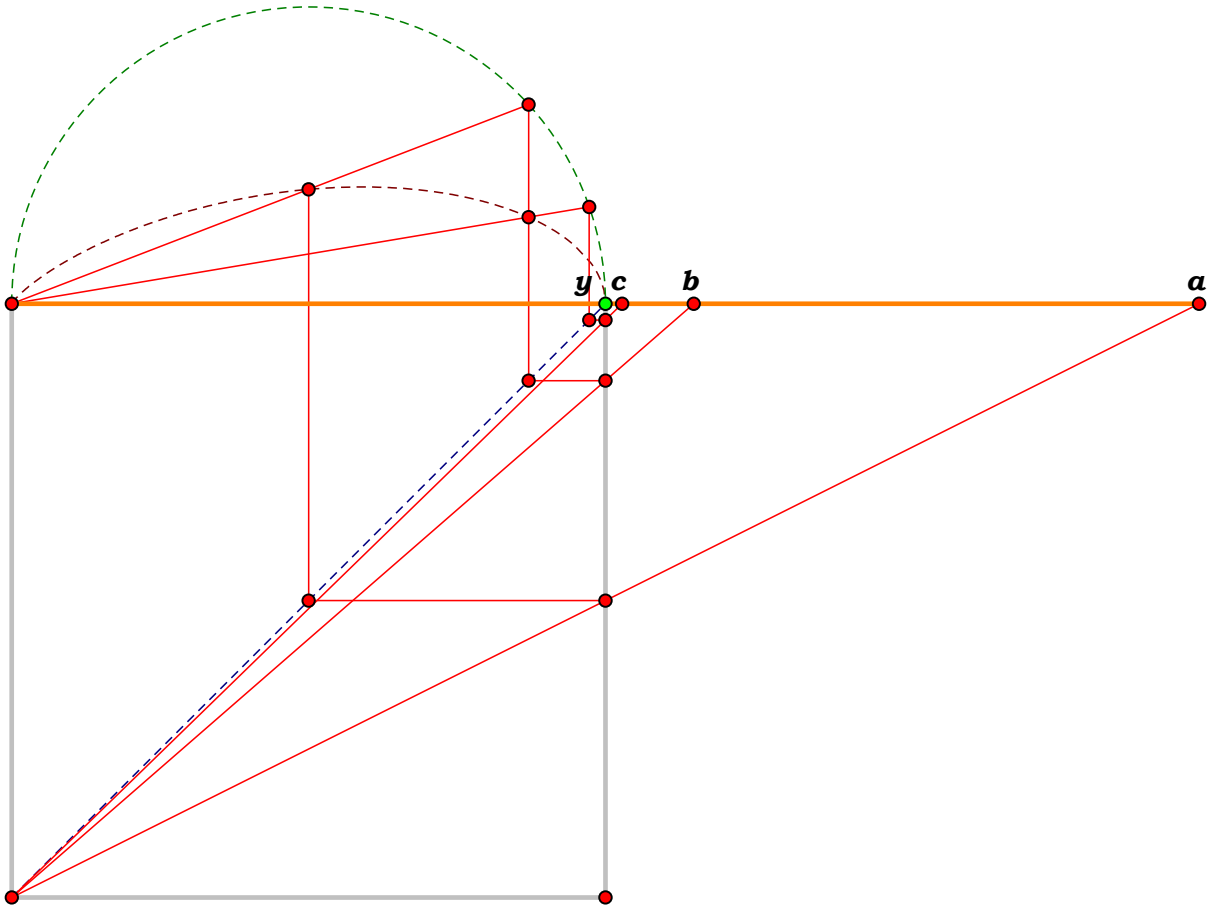
$d = 1.18921$

$a^{\frac{3}{4}} - b = 0.00000$

$a^{\frac{2}{4}} - c = 0.00000$

$a^{\frac{1}{4}} - d = 0.00000$

Two over three.



$Unit = 1.00000$

$x = 0.00000$

$y = 1.00000$

$a = 2.00000$

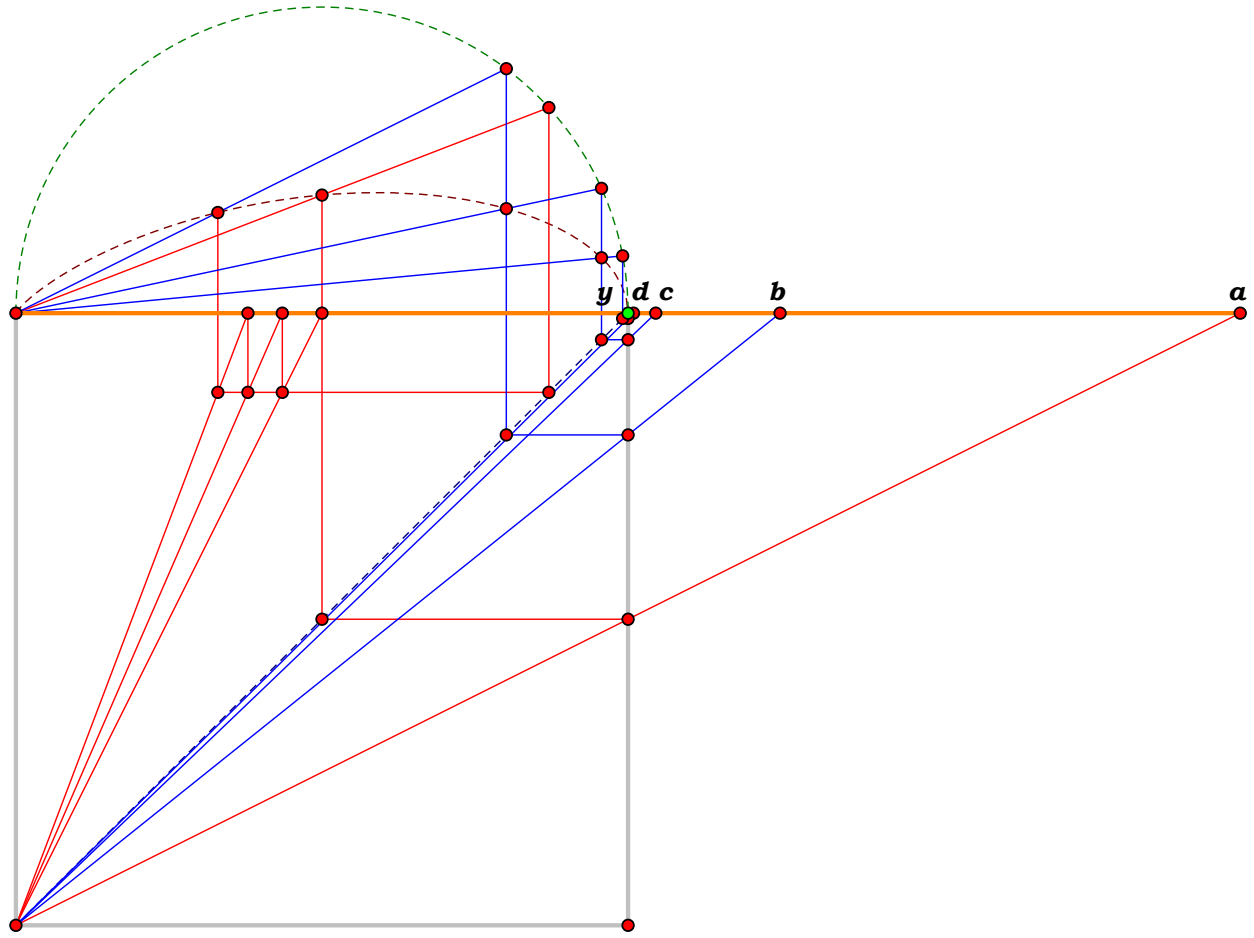
$b = 1.14870$

$c = 1.02811$

$a^{\frac{1}{5}} - b = 0.00000$

$a^{\frac{1}{25}} - c = 0.00000$

The Fourth Curve



$Unit = 1.00000$

$x = 0.00000$

$y = 1.00000$

$a = 2.00000$

$b = 1.24833$

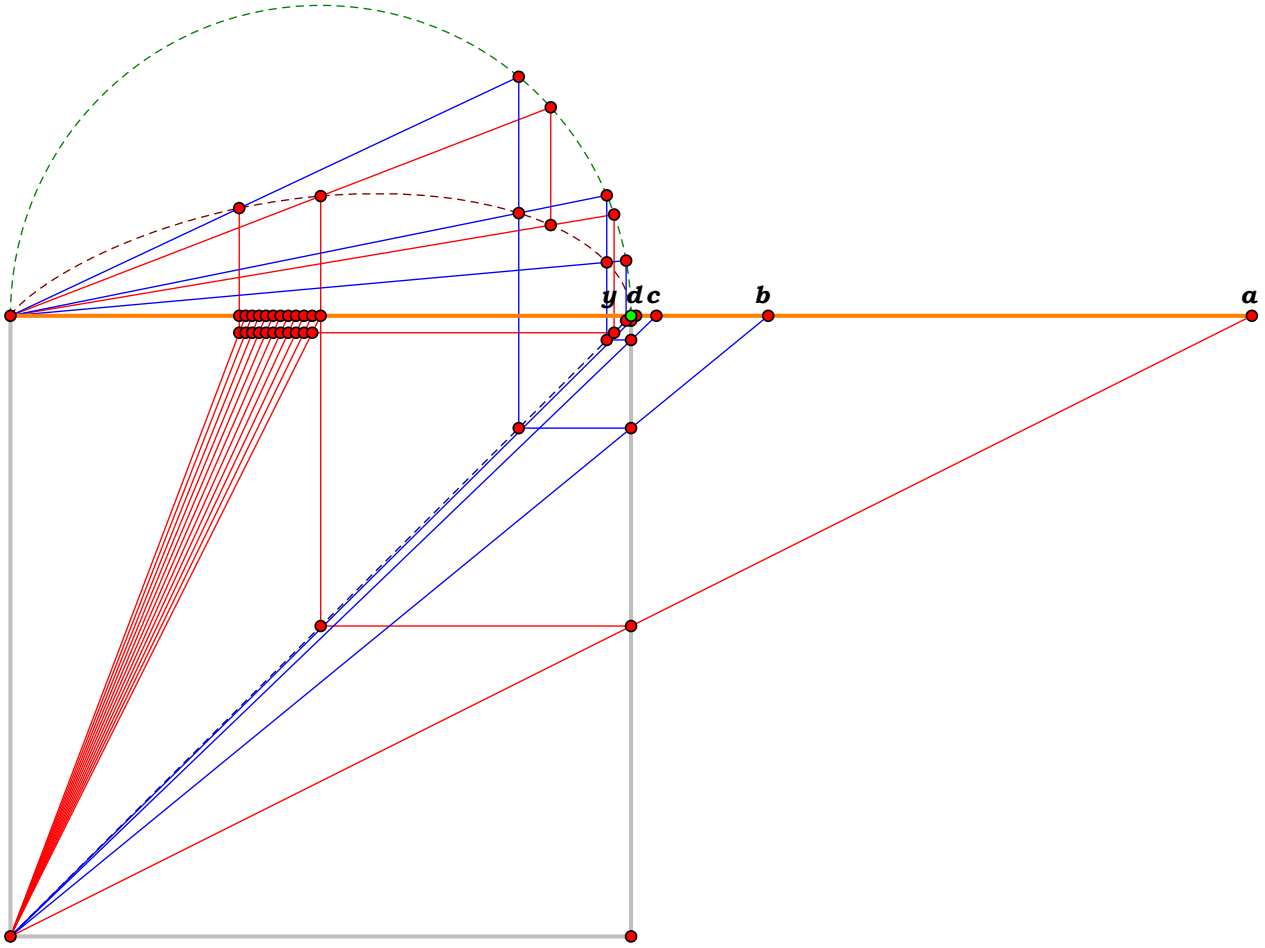
$c = 1.04536$

$d = 1.00891$

$a^{\frac{8}{25}} - b = 0.00000$

$a^{\frac{8}{125}} - c = 0.00000$

$a^{\frac{8}{625}} - d = 0.00000$



$Unit = 1.00000$

$x = 0.00000$

$y = 1.00000$

$a = 2.00000$

$b = 1.22095$

$c = 1.04073$

$d = 1.00802$

$a^{\frac{36}{125}} - b = 0.00000$

$a^{\frac{36}{625}} - c = 0.00000$

$a^{\frac{36}{3125}} - d = 0.00000$

$Unit = 1.00000$

$x = 0.00000$

$y = 1.00000$

$a = 2.00000$

$b = 1.74110$

$c = 1.51572$

$d = 1.31951$

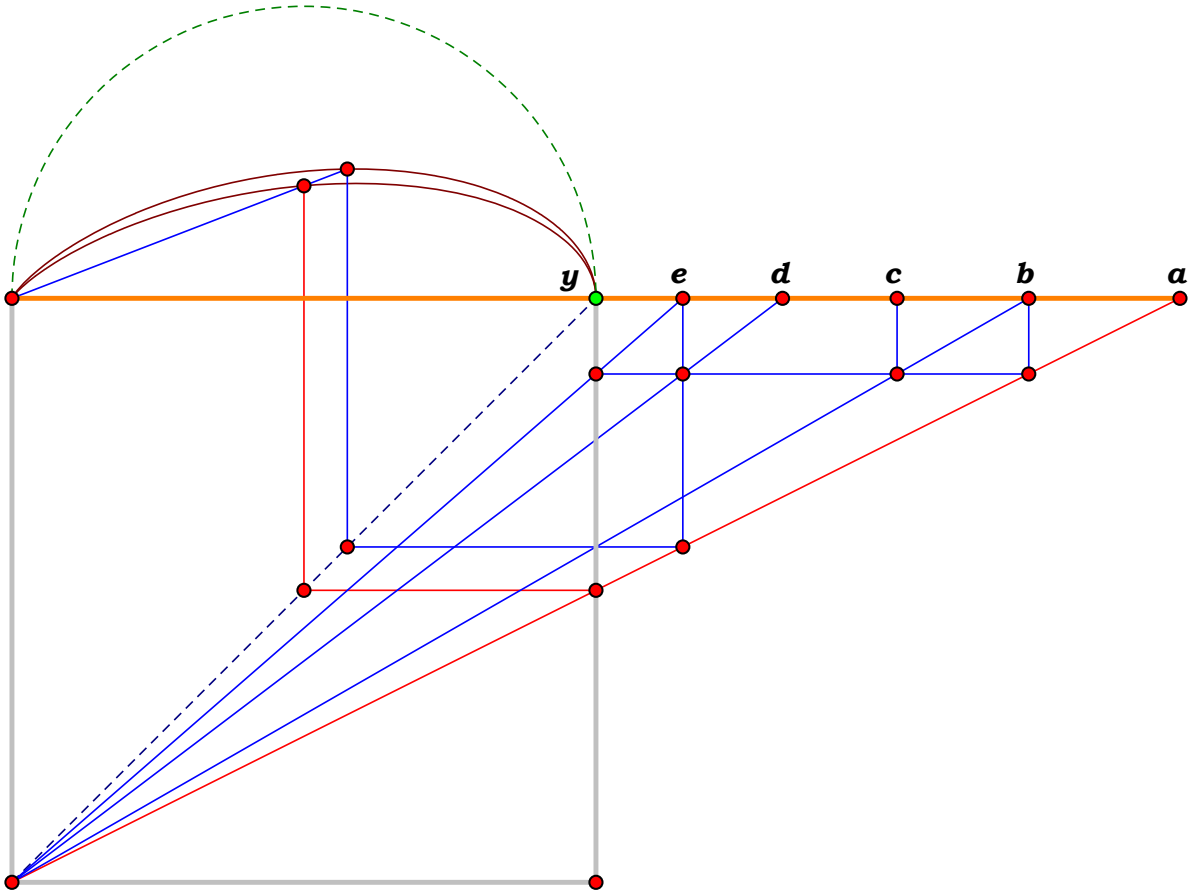
$e = 1.14870$

$a^{\frac{4}{5}} - b = 0.00000$

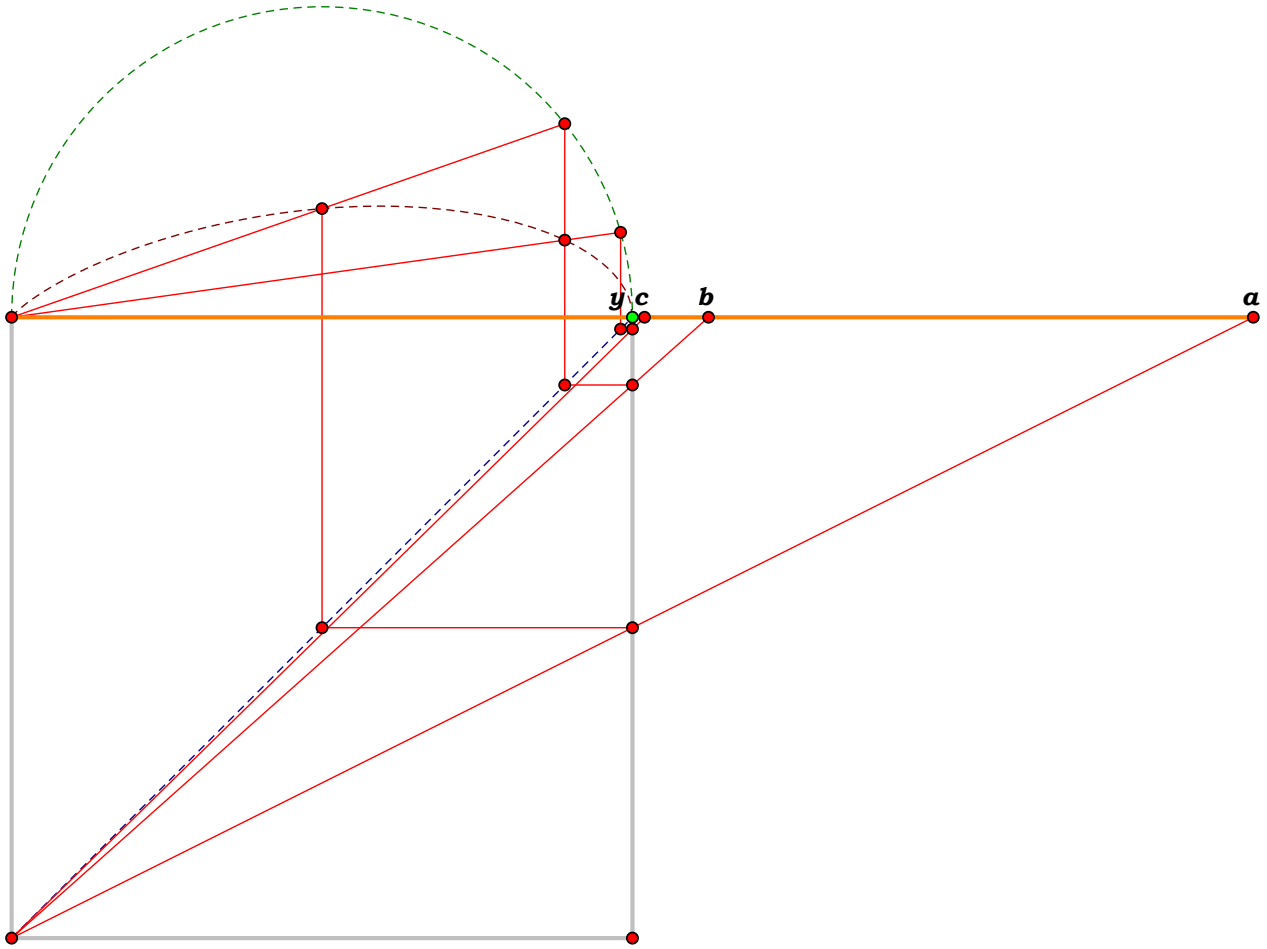
$a^{\frac{3}{5}} - c = 0.00000$

$a^{\frac{2}{5}} - d = 0.00000$

$a^{\frac{1}{5}} - e = 0.00000$



Three over four



$Unit = 1.00000$

$x = 0.00000$

$y = 1.00000$

$a = 2.00000$

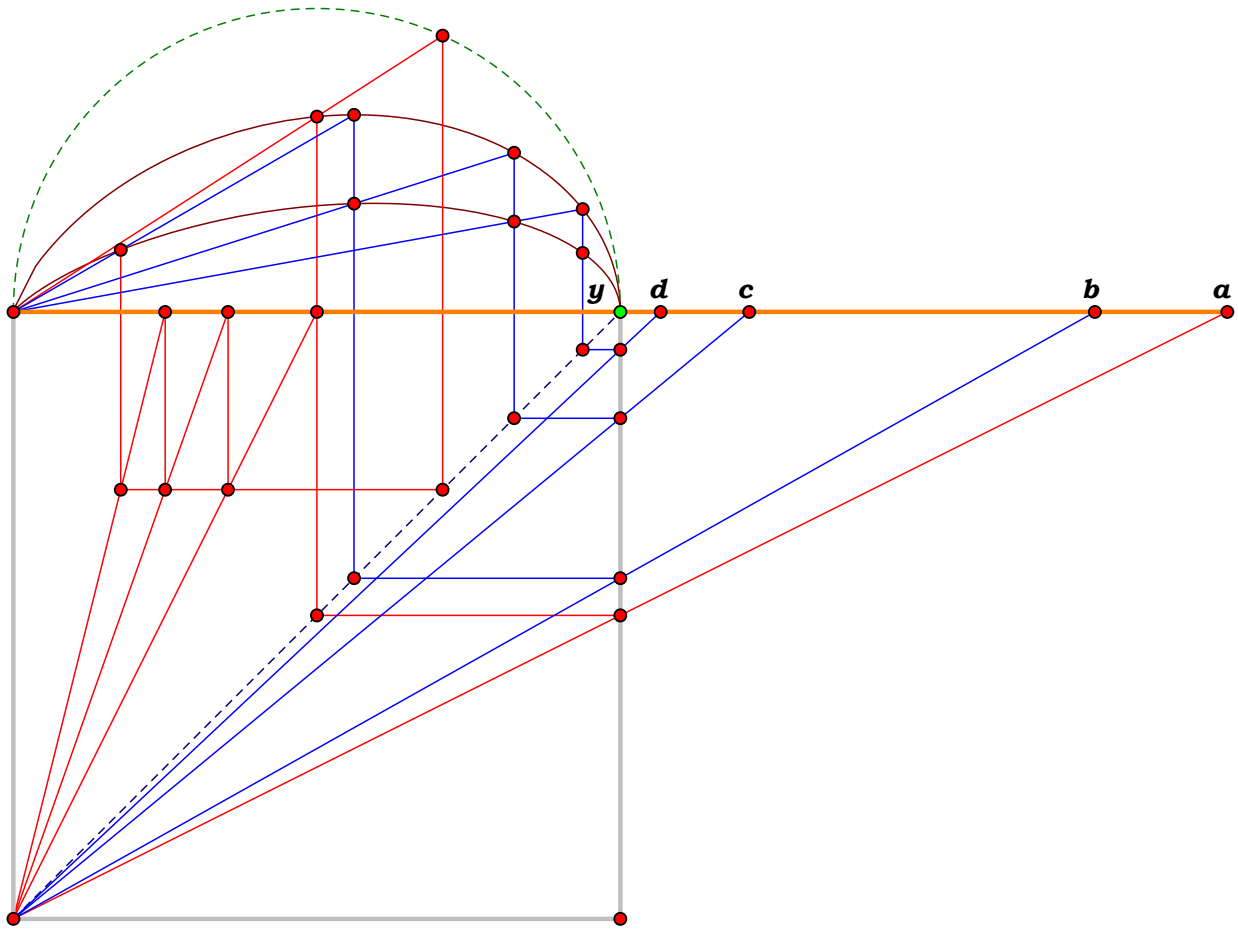
$b = 1.12246$

$c = 1.01944$

$a^{\frac{1}{6}} - b = 0.00000$

$a^{\frac{1}{36}} - c = 0.00000$

Fifth Curve



$Unit = 1.00000$

$x = 0.00000$

$y = 1.00000$

$a = 2.00000$

$b = 1.78180$

$c = 1.21233$

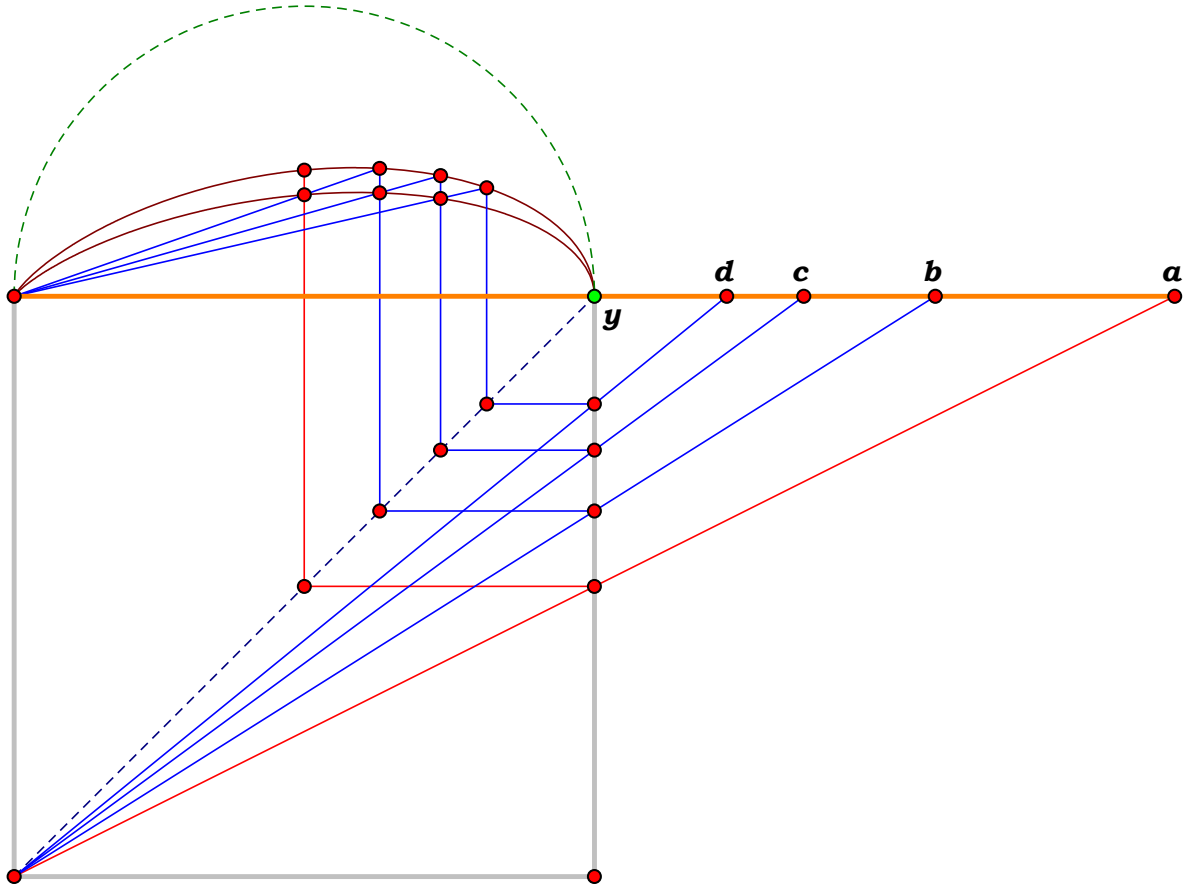
$d = 1.06628$

$a^{\frac{30}{36}} - b = 0.00000$

$a^{\frac{60}{216}} - c = 0.00000$

$a^{\frac{120}{1296}} - d = 0.00000$

One over five



$Unit = 1.00000$

$x = 0.00000$

$y = 1.00000$

$a = 2.00000$

$b = 1.58740$

$c = 1.36079$

$d = 1.22799$

$a^{\frac{4}{6}} - b = 0.00000$

$a^{\frac{16}{36}} - c = 0.00000$

$a^{\frac{64}{216}} - d = 0.00000$

Third over fifth.

$Unit = 1.00000$

$x = 0.00000$

$y = 1.00000$

$a = 2.00000$

$b = 1.78180$

$c = 1.58740$

$d = 1.41421$

$e = 1.25992$

$f = 1.12246$

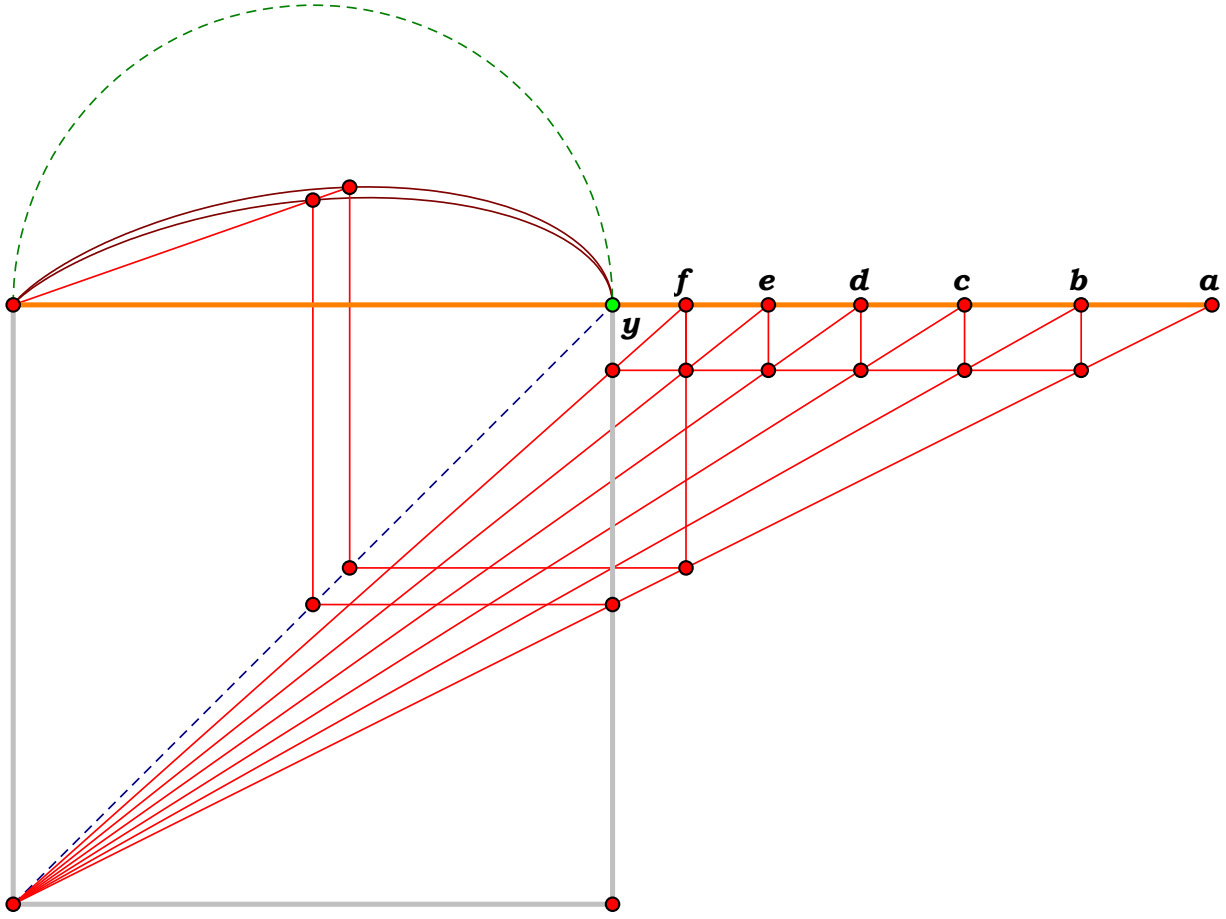
$a^{\frac{5}{6}} - b = 0.00000$

$a^{\frac{4}{6}} - c = 0.00000$

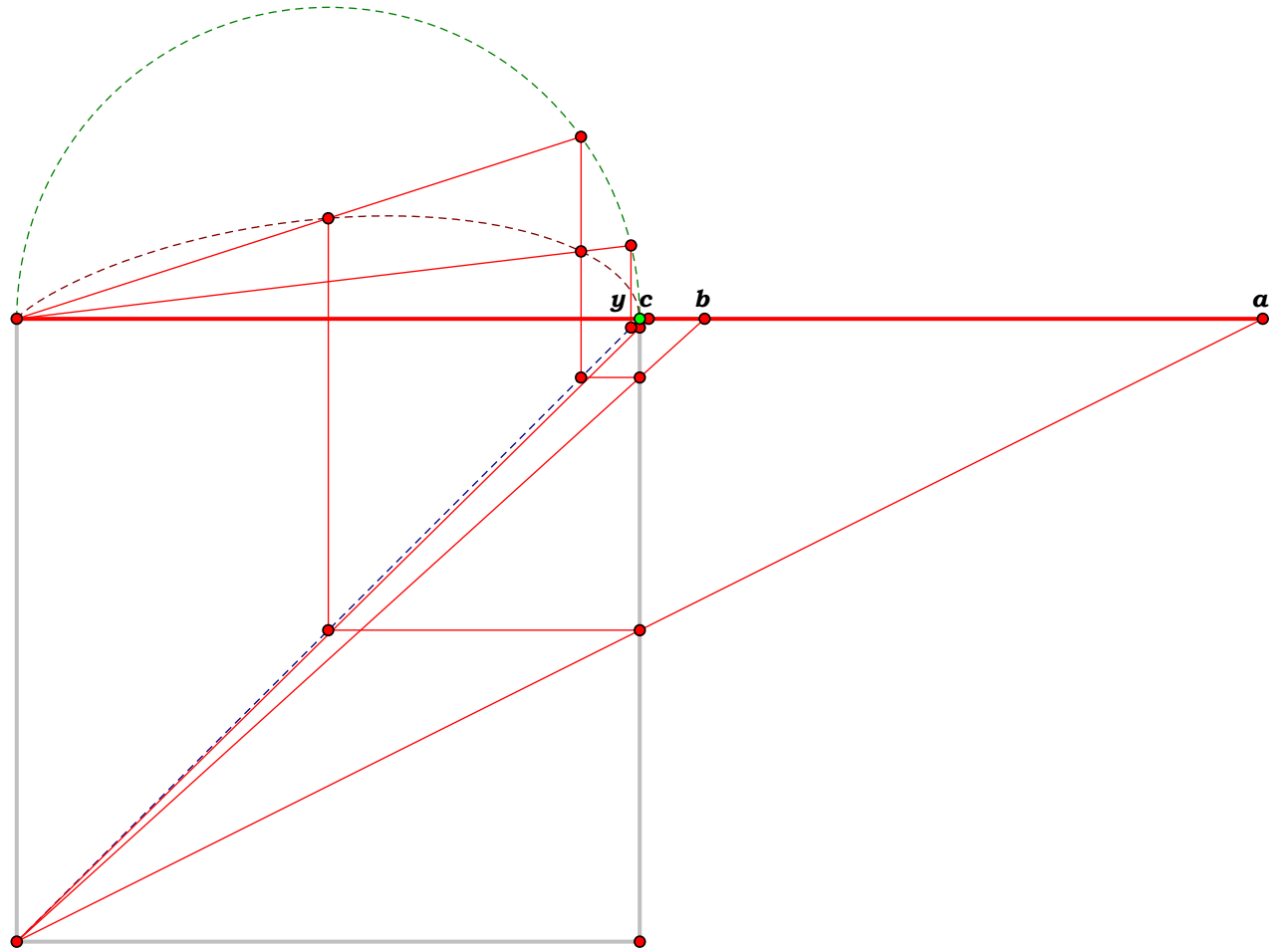
$a^{\frac{3}{6}} - d = 0.00000$

$a^{\frac{2}{6}} - e = 0.00000$

$a^{\frac{1}{6}} - f = 0.00000$



Four over five



$Unit = 1.00000$

$x = 0.00000$

$y = 1.00000$

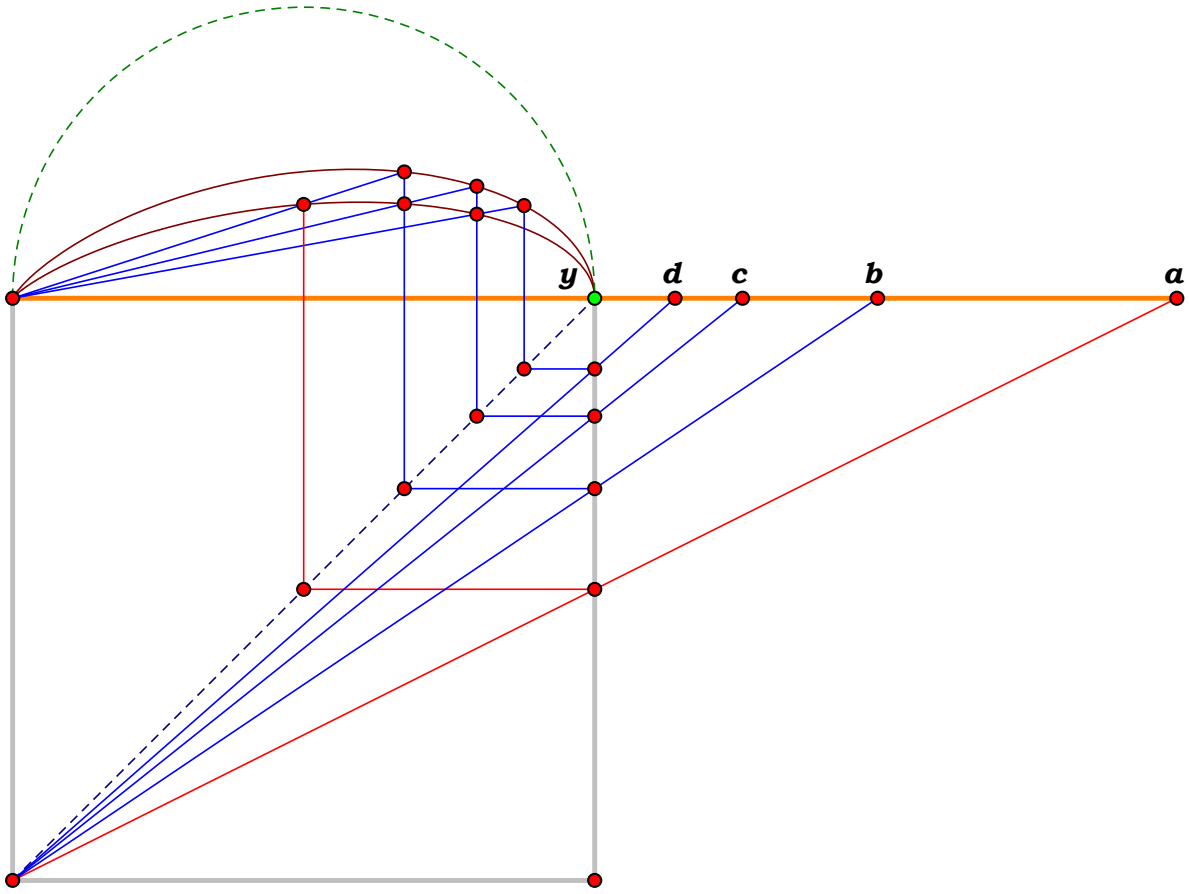
$a = 2.00000$

$b = 1.10409$

$c = 1.01425$

$a^{\frac{1}{7}} - b = 0.00000$

$a^{\frac{1}{49}} - c = 0.00000$



$Unit = 1.00000$

$x = 0.00000$

$y = 1.00000$

$a = 2.00000$

$b = 1.48599$

$c = 1.25399$

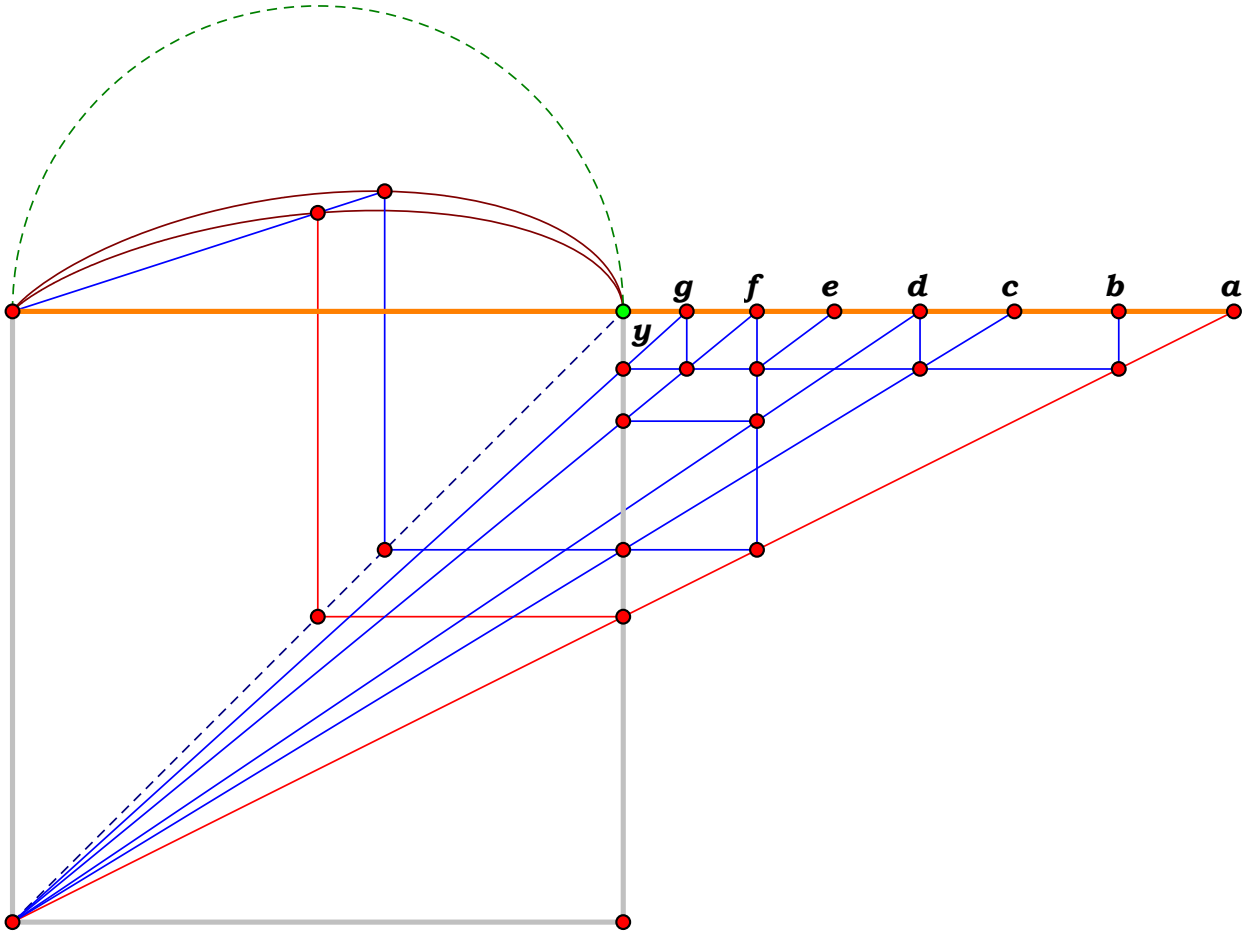
$d = 1.13807$

$a^{\frac{4}{7}} - b = 0.00000$

$a^{\frac{16}{49}} - c = 0.00000$

$a^{\frac{64}{343}} - d = 0.00000$

Three over six



$Unit = 1.00000$

$x = 0.00000$

$y = 1.00000$

$a = 2.00000$

$b = 1.81145$

$c = 1.64067$

$d = 1.48599$

$e = 1.34590$

$f = 1.21901$

$g = 1.10409$

$a^{\frac{6}{7}} - b = 0.00000$

$a^{\frac{5}{7}} - c = 0.00000$

$a^{\frac{4}{7}} - d = 0.00000$

$a^{\frac{3}{7}} - e = 0.00000$

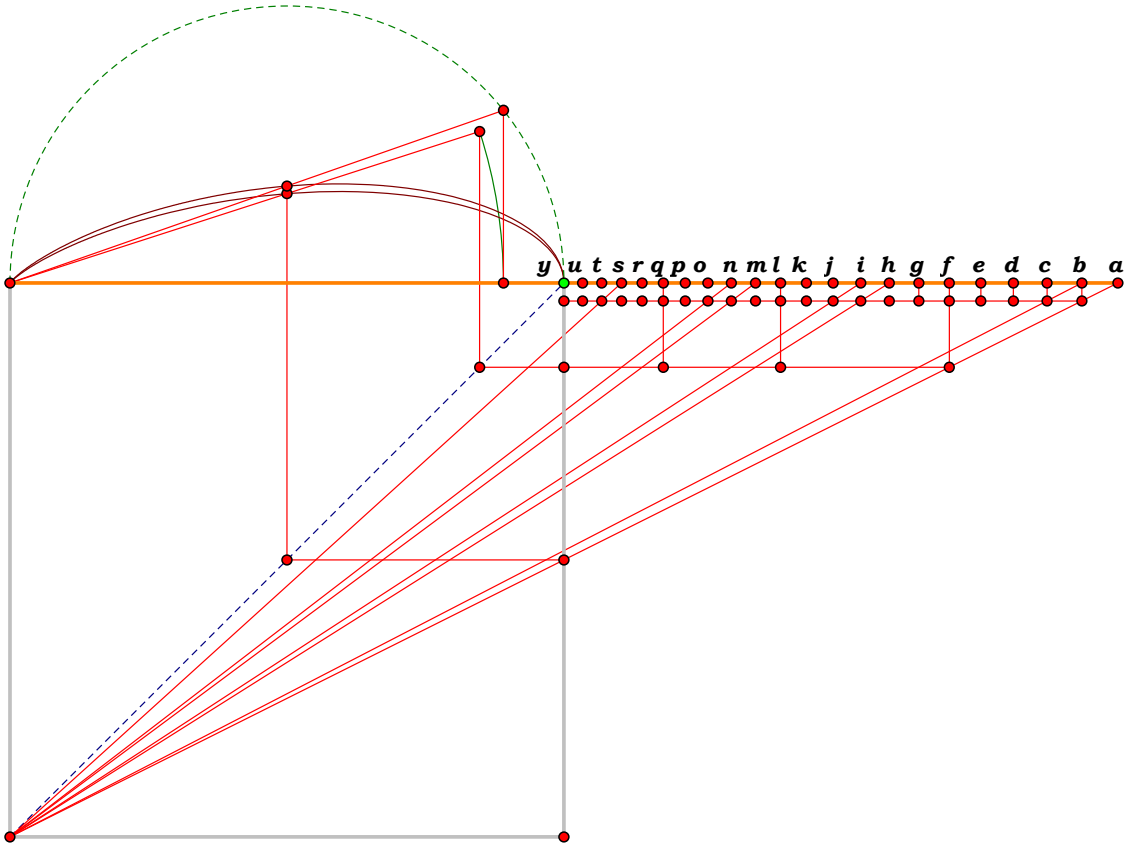
$a^{\frac{2}{7}} - f = 0.00000$

$a^{\frac{1}{7}} - g = 0.00000$

Four over six

Unit = 1.00000
x = 0.00000
y = 1.00000
a = 2.00000
b = 1.93506
c = 1.87224
d = 1.81145
e = 1.75263
f = 1.69573
g = 1.64067
h = 1.58740
i = 1.53586
j = 1.48599
k = 1.43775
l = 1.39107
m = 1.34590
n = 1.30220
o = 1.25992
p = 1.21901
q = 1.17943
r = 1.14114
s = 1.10409
t = 1.06824
u = 1.03356

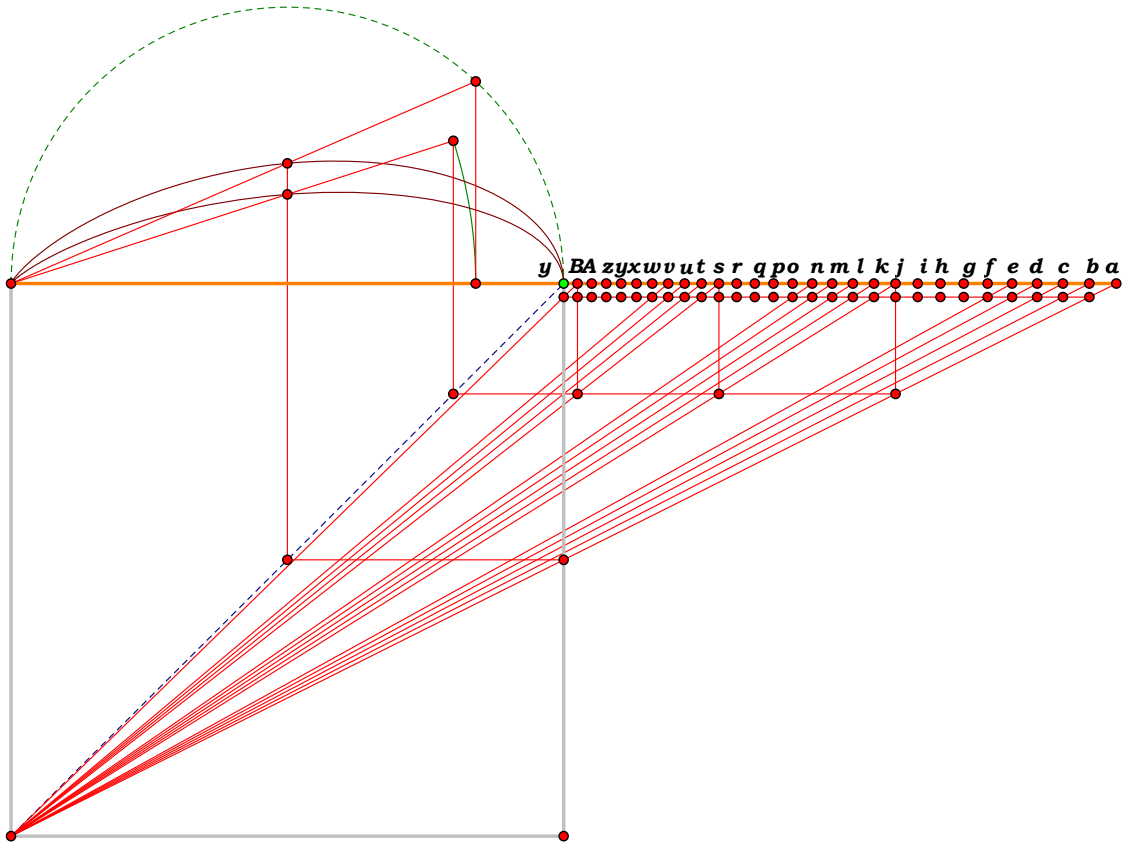
$a^{\frac{20}{21}} - b = 0.00000$
$a^{\frac{19}{21}} - c = 0.00000$
$a^{\frac{18}{21}} - d = 0.00000$
$a^{\frac{17}{21}} - e = 0.00000$
$a^{\frac{16}{21}} - f = 0.00000$
$a^{\frac{15}{21}} - g = 0.00000$
$a^{\frac{14}{21}} - h = 0.00000$
$a^{\frac{13}{21}} - i = 0.00000$
$a^{\frac{12}{21}} - j = 0.00000$
$a^{\frac{11}{21}} - k = 0.00000$
$a^{\frac{10}{21}} - l = 0.00000$
$a^{\frac{9}{21}} - m = 0.00000$
$a^{\frac{8}{21}} - n = 0.00000$
$a^{\frac{7}{21}} - o = 0.00000$
$a^{\frac{6}{21}} - p = 0.00000$
$a^{\frac{5}{21}} - q = 0.00000$
$a^{\frac{4}{21}} - r = 0.00000$
$a^{\frac{3}{21}} - s = 0.00000$
$a^{\frac{2}{21}} - t = 0.00000$
$a^{\frac{1}{21}} - u = 0.00000$



Five over six

Unit = 1.00000
x = 0.00000
y = 1.00000
a = 2.00000
b = 1.95110
c = 1.90339
d = 1.85685
e = 1.81145
f = 1.76715
g = 1.72395
h = 1.68179
i = 1.64067
j = 1.60055
k = 1.56142
l = 1.52324
m = 1.48599
n = 1.44966
o = 1.41421
p = 1.37963
q = 1.34590
r = 1.31299
s = 1.28089
t = 1.24957
u = 1.21901
v = 1.18921
w = 1.16013
x = 1.13176
y = 1.10409
z = 1.07709
A = 1.05076
B = 1.02506

$a^{\frac{27}{28}} - b = 0.00000$
$a^{\frac{26}{28}} - c = 0.00000$
$a^{\frac{25}{28}} - d = 0.00000$
$a^{\frac{24}{28}} - e = 0.00000$
$a^{\frac{23}{28}} - f = 0.00000$
$a^{\frac{22}{28}} - g = 0.00000$
$a^{\frac{21}{28}} - h = 0.00000$
$a^{\frac{20}{28}} - i = 0.00000$
$a^{\frac{19}{28}} - j = 0.00000$
$a^{\frac{18}{28}} - k = 0.00000$
$a^{\frac{17}{28}} - l = 0.00000$
$a^{\frac{16}{28}} - m = 0.00000$
$a^{\frac{15}{28}} - n = 0.00000$
$a^{\frac{14}{28}} - o = 0.00000$
$a^{\frac{13}{28}} - p = 0.00000$
$a^{\frac{12}{28}} - q = 0.00000$
$a^{\frac{11}{28}} - r = 0.00000$
$a^{\frac{10}{28}} - s = 0.00000$
$a^{\frac{9}{28}} - t = 0.00000$
$a^{\frac{8}{28}} - u = 0.00000$
$a^{\frac{7}{28}} - v = 0.00000$
$a^{\frac{6}{28}} - w = 0.00000$
$a^{\frac{5}{28}} - x = 0.00000$
$a^{\frac{4}{28}} - y = 0.00000$



Three over six

$a^{\frac{3}{28}} - z = 0.00000$
$a^{\frac{2}{28}} - A = 0.00000$
$a^{\frac{1}{28}} - B = 0.00000$

$Unit = 1.00000$

$x = 0.00000$

$y = 1.00000$

$a = 2.00000$

$b = 1.81145$

$c = 1.64067$

$d = 1.48599$

$e = 1.34590$

$f = 1.21901$

$g = 1.10409$

$a^{\frac{6}{7}} - b = 0.00000$

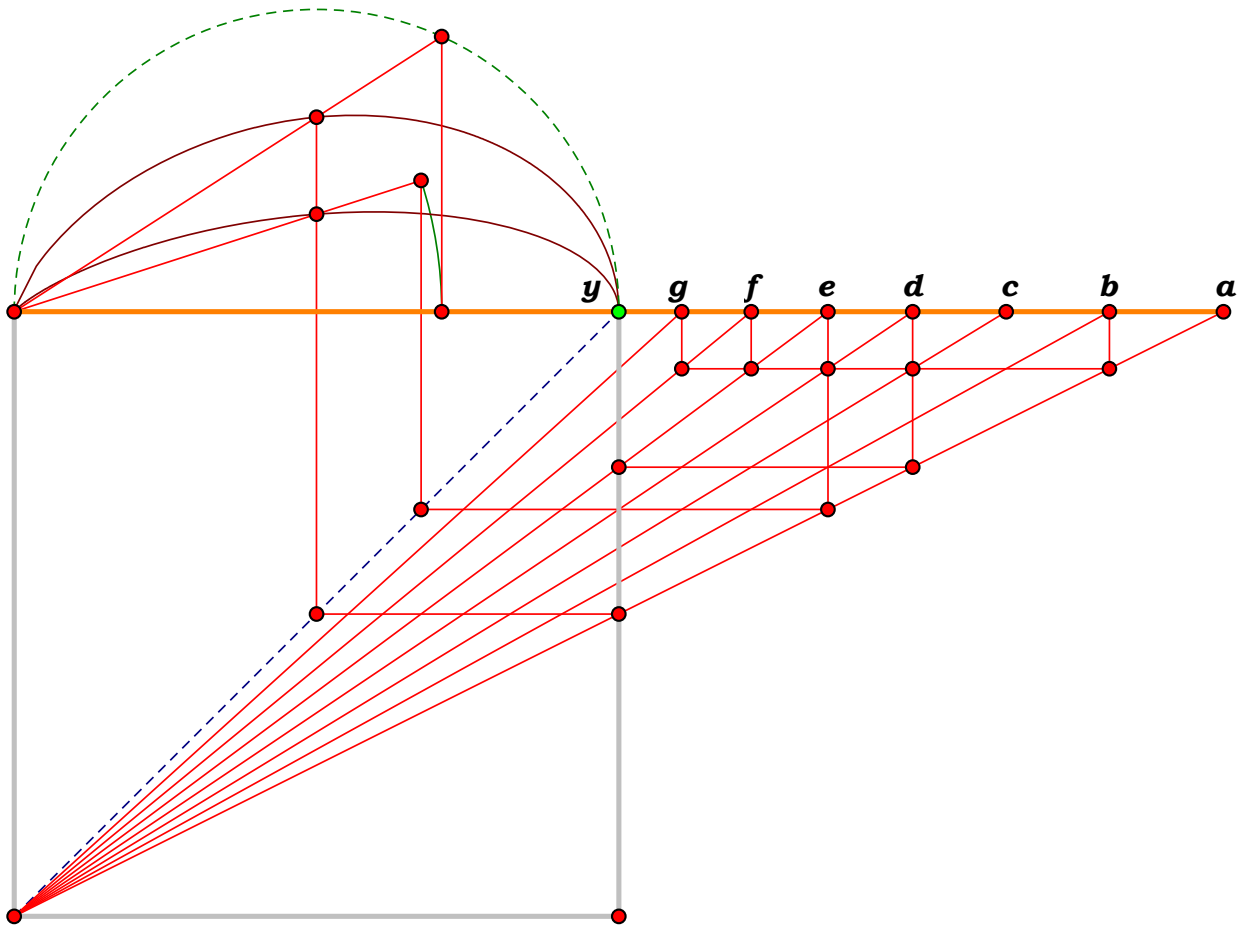
$a^{\frac{5}{7}} - c = 0.00000$

$a^{\frac{4}{7}} - d = 0.00000$

$a^{\frac{3}{7}} - e = 0.00000$

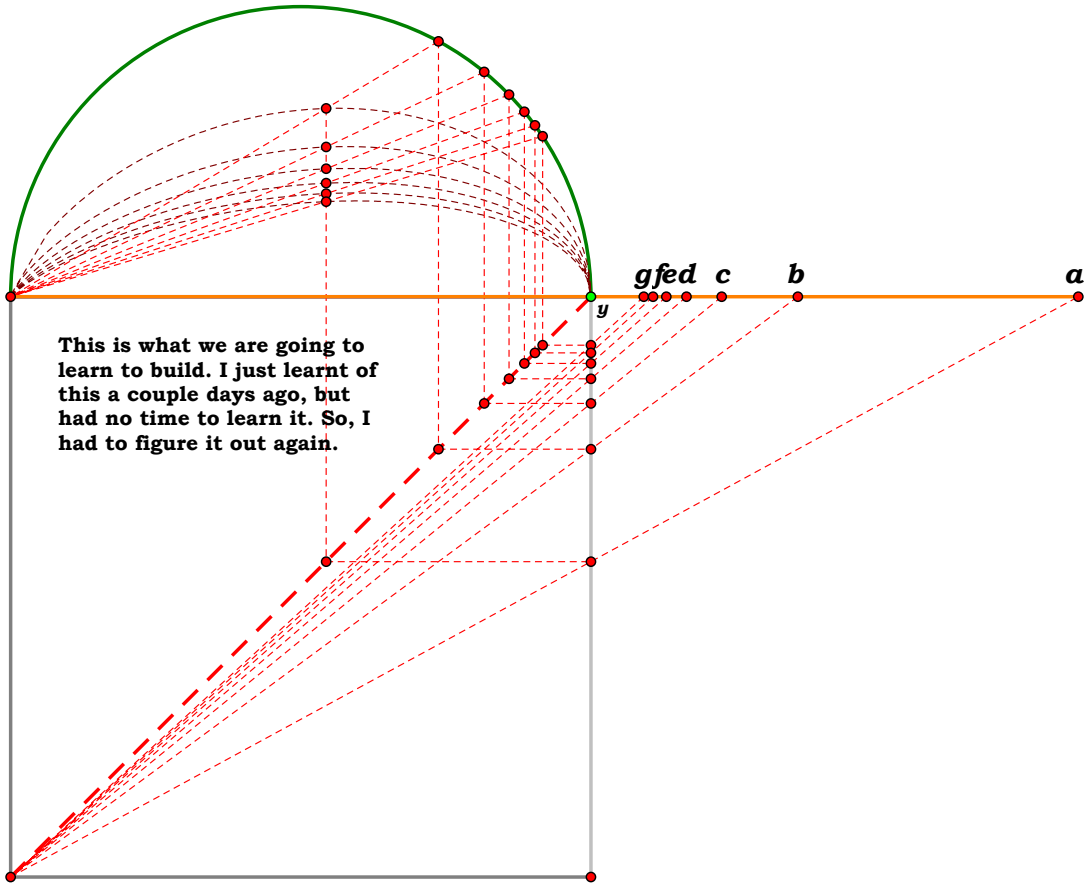
$a^{\frac{2}{7}} - f = 0.00000$

$a^{\frac{1}{7}} - g = 0.00000$

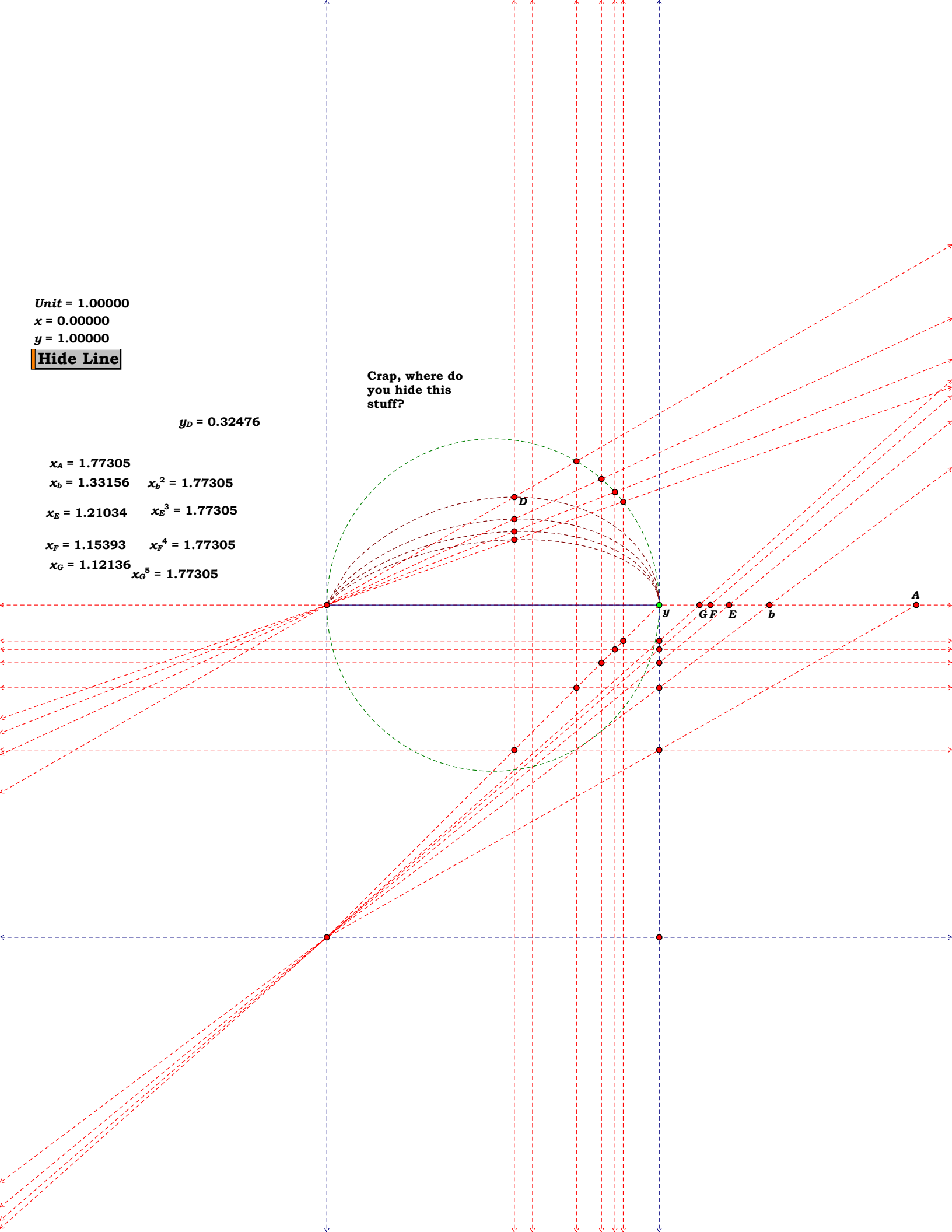


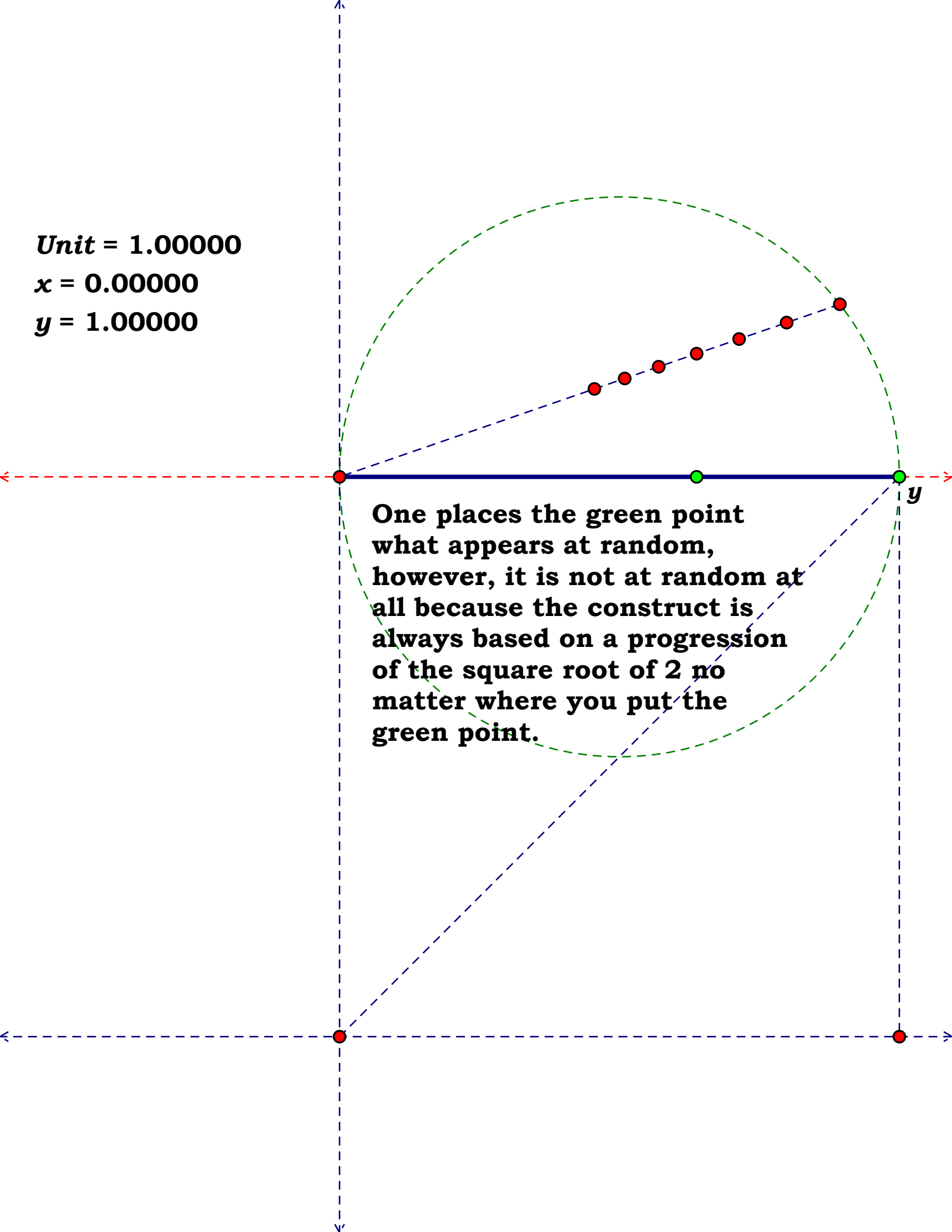
One over six

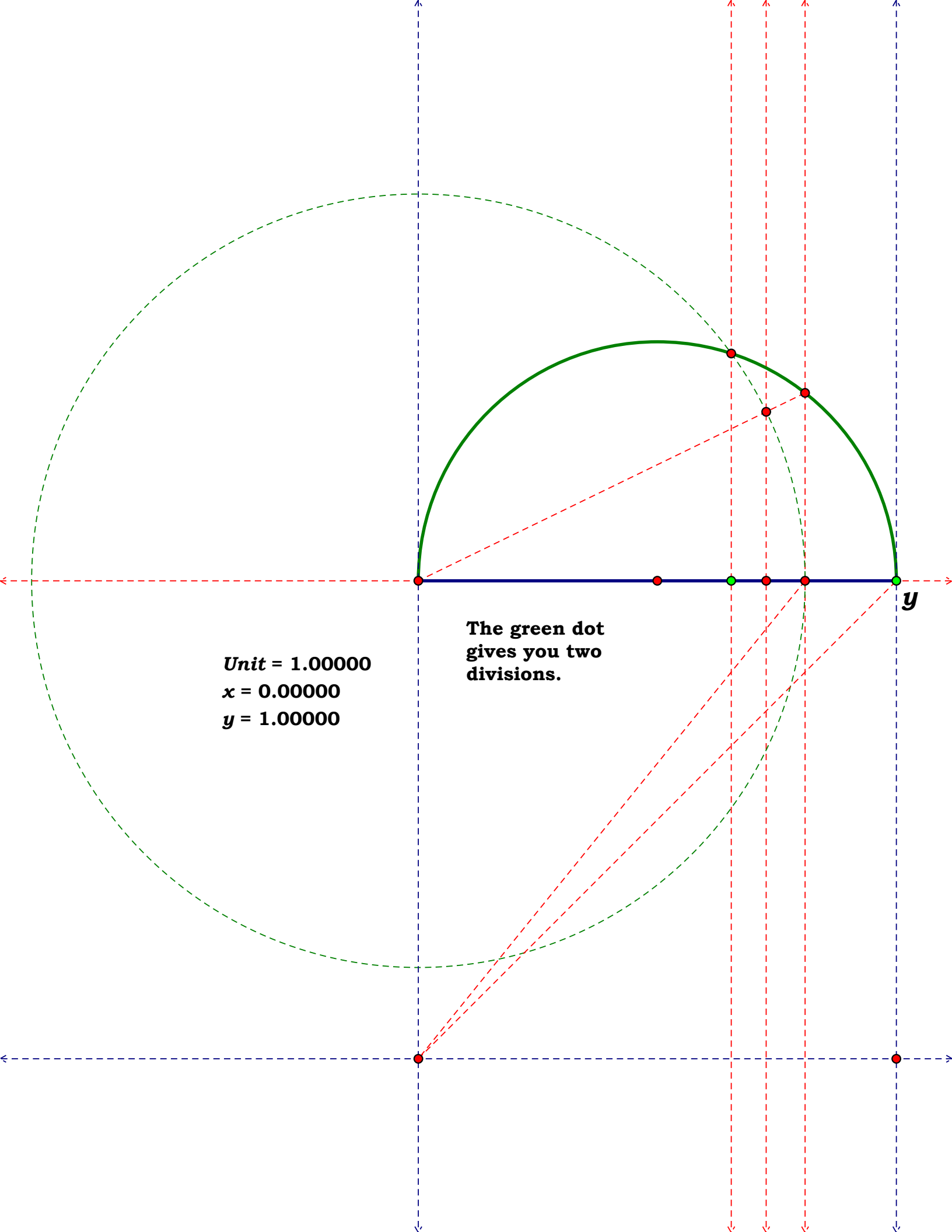
Basic Exponential Series

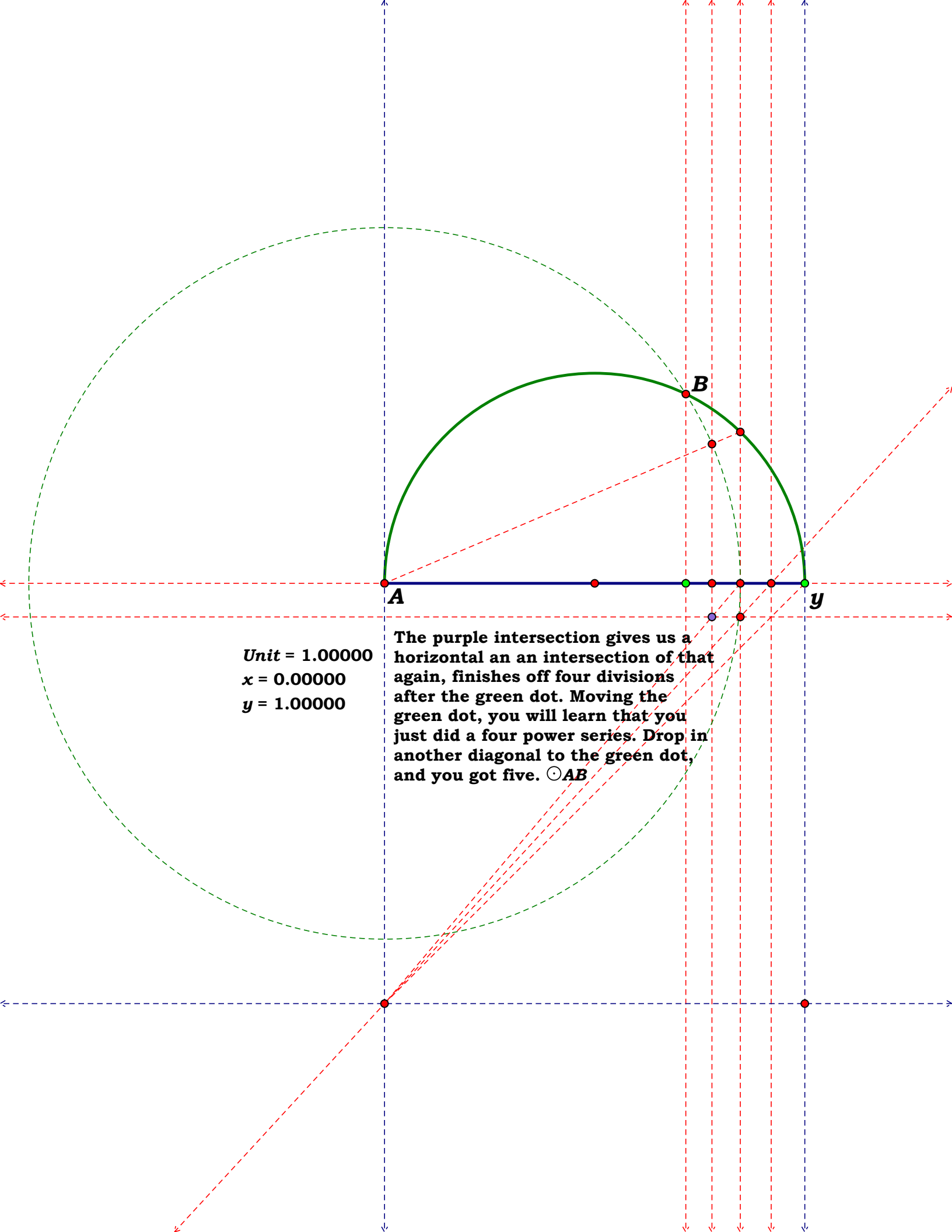


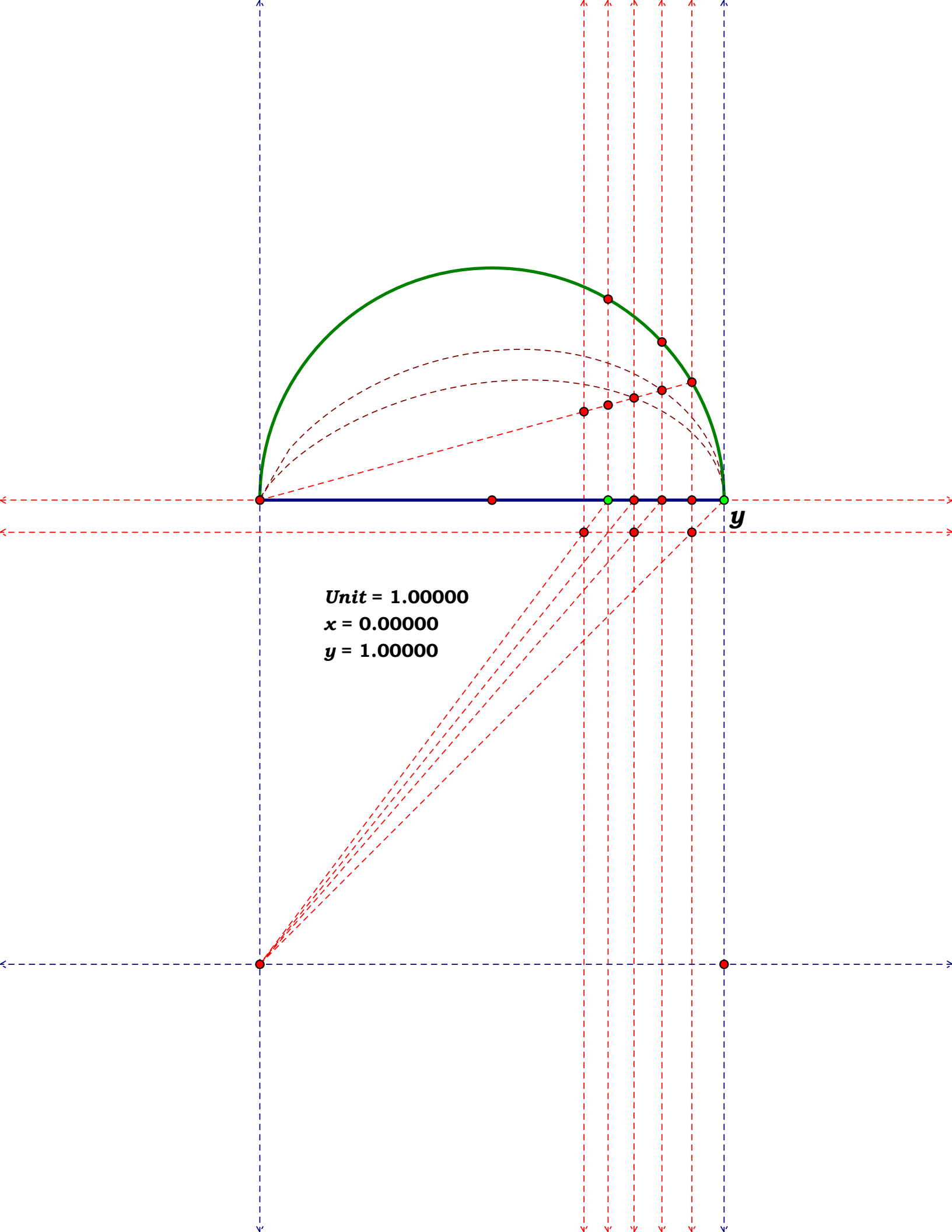
Unit = 1.00000
x = 0.00000
y = 1.00000
a = 1.83975
b = 1.35638 $b^2 - a$ = 0.00000
c = 1.22533 $c^3 - a$ = 0.00000
d = 1.16464 $d^4 - a$ = 0.00000
e = 1.12967 $e^5 - a$ = 0.00000
f = 1.10695 $f^6 - a$ = 0.00000
g = 1.09100 $g^7 - a$ = 0.00000

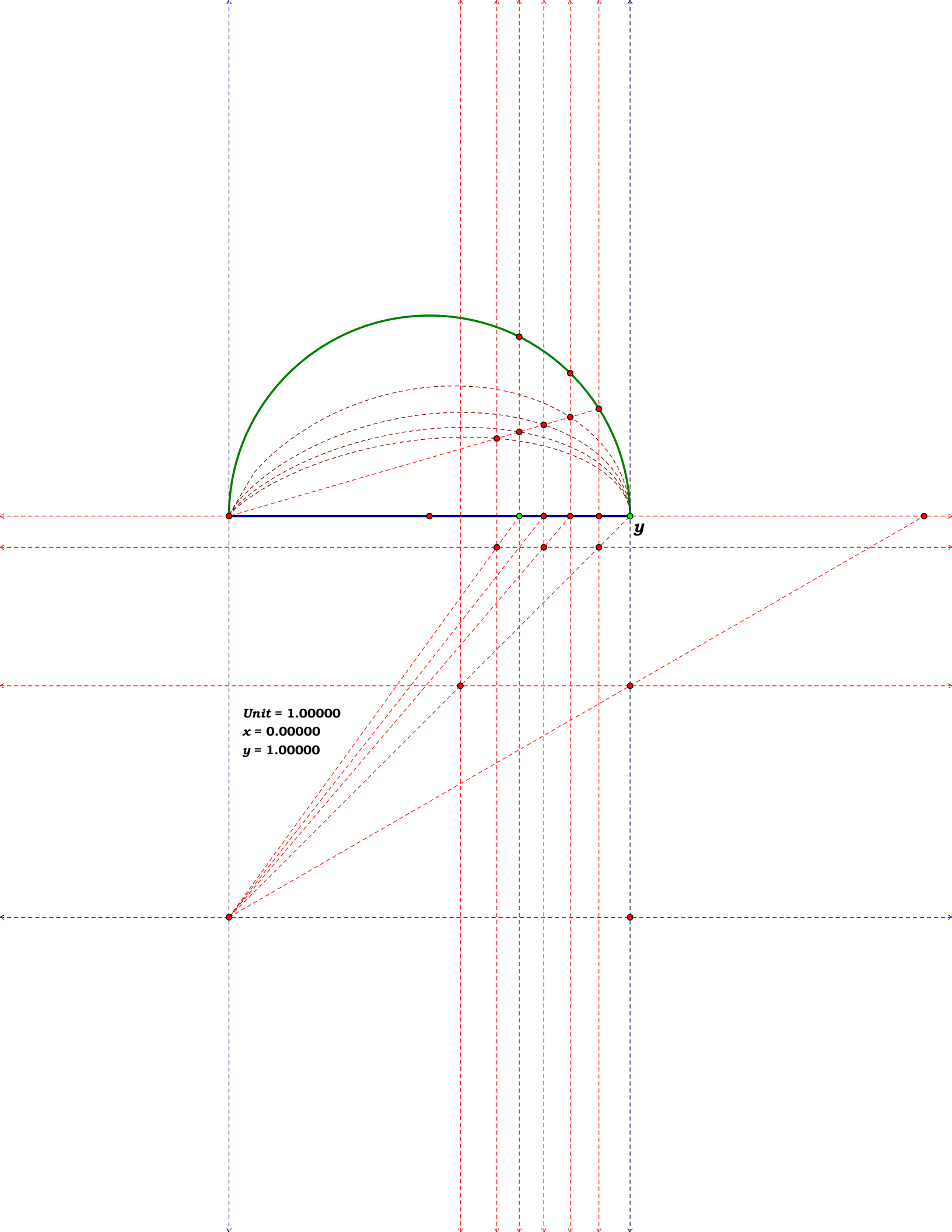

Unit = 1.00000
x = 0.00000
y = 1.00000
Hide Line
Crap, where do you hide this stuff?
y_D = 0.32476
x_A = 1.77305
x_b = 1.33156
x_b^2 = 1.77305
x_E = 1.21034
x_E^3 = 1.77305
x_F = 1.15393
x_F^4 = 1.77305
x_G = 1.12136
x_G^5 = 1.77305
D
y
G
F
E
b
A


Unit = 1.00000
x = 0.00000
y = 1.00000
y
One places the green point what appears at random, however, it is not at random at all because the construct is always based on a progression of the square root of 2 no matter where you put the green point.

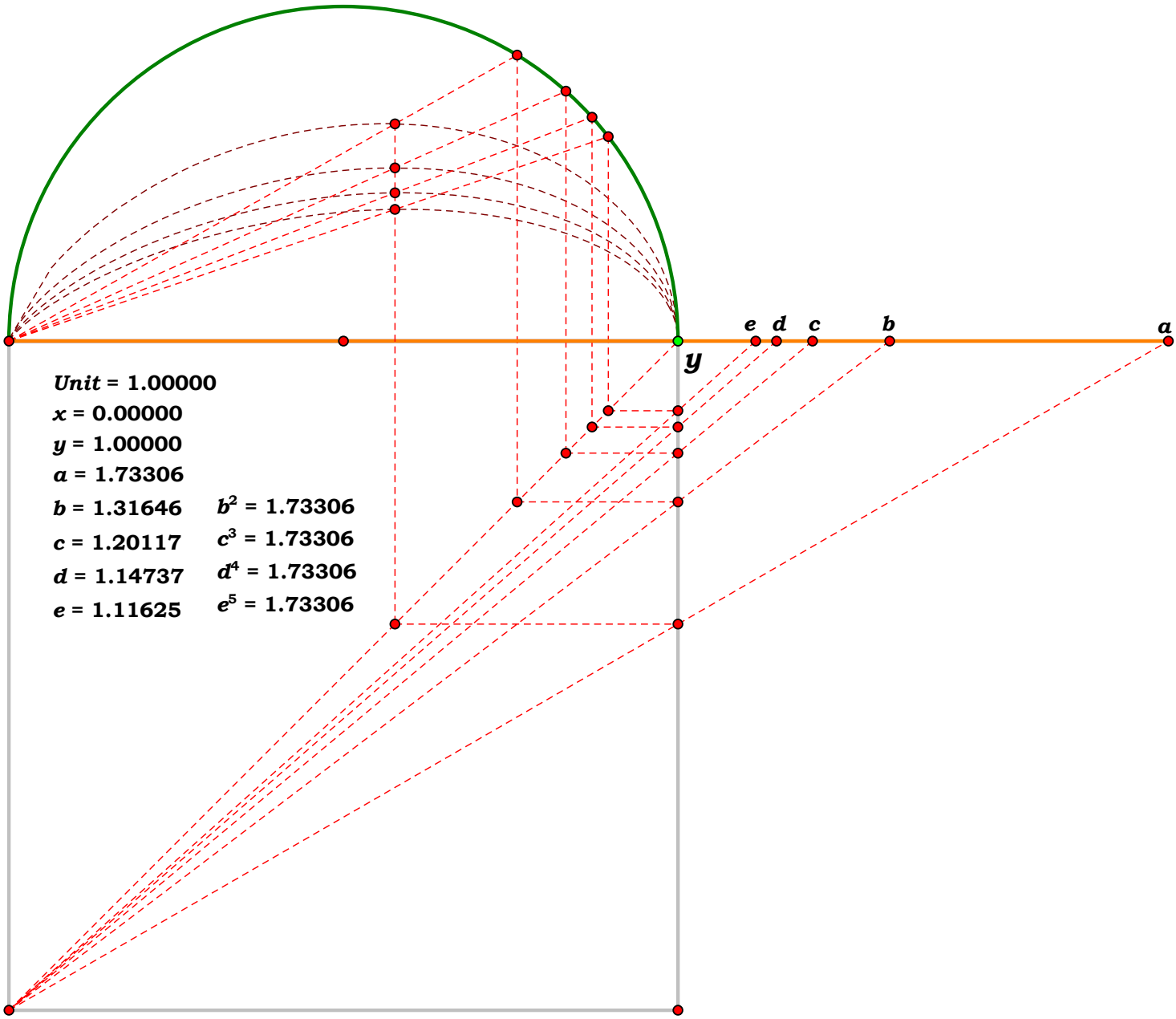

y
The green dot gives you two divisions.
Unit = 1.00000
x = 0.00000
y = 1.00000


B
A
y
Unit = 1.00000
x = 0.00000
y = 1.00000
The purple intersection gives us a horizontal an an intersection of that again, finishes off four divisions after the green dot. Moving the green dot, you will learn that you just did a four power series. Drop in another diagonal to the green dot, and you got five. ⊙AB


y
Unit = 1.00000
x = 0.00000
y = 1.00000


y
Unit = 1.00000
x = 0.00000
y = 1.00000

All done.


e
d
c
b
a
y
Unit = 1.00000
x = 0.00000
y = 1.00000
a = 1.73306
b = 1.31646
c = 1.20117
d = 1.14737
e = 1.11625
b^2 = 1.73306
c^3 = 1.73306
d^4 = 1.73306
e^5 = 1.73306